

DOE/OR/1463&DO

MANAGEMENT ACTION PROCESS

for the

ENVIRONMENTAL RESTORATION PROGRAM

PORTSMOUTH GASEOUS DIFFUSION PLANT
Piketon, Ohio



April 4, 1996

MANAGEMENT ACTION PROCESS

for the

Portsmouth Gaseous Diffusion Plant
Piketon, Ohio

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Prepared by

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ACRONYMS AND INITIALISMS

ADS	Activity Data Sheet
ARAR	Applicable or Relevant and Appropriate Requirement
BAT	Best Available Technology
CAS/CMS	Cleanup Attention Study/Corrective Measures Study
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (1980)
CERMIS	Comprehensive Environmental Restoration Management Information System
CHF	Containment Hazard Factor
DOE	Department of Energy
D&D	Decontamination & Decommissioning
ER	Environmental Restoration
EPA	Environmental Protection Agency
EM-40	Office of Environmental Restoration
EIS	Environmental Impact Statement
FAR	Federal Acquisition Regulations
FFCA	Federal Facility Compliance Agreement
FY	Fiscal Year
HWMU	Hazardous Waste Management Unit
LLW	Low-level Radiative Wastes
LMES	Lockheed Martin Energy Systems, Inc.
LMUS	Lockheed Martin Utility Services, Inc.
MAP	Management Action Process
MCIS	Management Control Information System
MMUS	Martin Marietta Utility Services, Inc.
MPF	Migration Pathway Factor
MSR	Monthly Status Report
NEPA	National Environmental Policy Act
NRC	Nuclear Regulatory Commission
OEPA	Ohio Environmental Protection Agency
OVEC	Ohio Valley Electrical Compliance
PCB	Polychlorinated Biphenyls
PP&WM	Pollution Prevention and Waste Minimization
PTS	Project Tracking System
QA/QC	Quality Assurance/Quality Control
ROD	Record of Decision
RAM	Responsibility Assignment Matrix
RCRA	Resource Conservation and Recovery Act of 1976
RF	Receptor Factor
RFI	RCRA Facility Investigation
STP	Site Treatment Plan
SWMU	Solid Waste Management Unit
S&M	Surveillance & Monitoring
TSCA	Toxic Substance Control Act
TWA	Task Work Agreement
USEC	United States Enrichment Corporation

1.0 INTRODUCTION

A critical mission of the Department of Energy (DOE or Department) is the planning, implementation, and completion of environmental restoration (ER) programs at operating and inactive Department facilities. The Portsmouth Gaseous Diffusion Plant (PORTS) is located in south central Ohio. Specifically, the plant is situated east of US Route 23 in rural Pike County, approximately four miles southeast of the village of Piketon.

The purpose of the PORTS Facility is the separation of uranium isotopes by gaseous diffusion. The process produces enriched uranium used as fuel in commercial nuclear power plants. Although the federally owned plant is now leased by the United States Enrichment Corporation (USEC), environmental restoration and related waste management activities are conducted by the DOE. The mission of the Department's ER Program is to protect human health and the environment from risks posed by inactive facilities, surplus facilities, and contaminated areas by remediating sites and facilities in the most cost-efficient, responsible manner possible for future beneficial reuse. This mission will be accomplished by adhering to the ER Program core values:

- Ensure protection of workers, the public health and safety, and the environment;
- Serve as a public steward of natural and cultural resources;
- Comply with federal, state, and local statutes;
- Use taxpayers' money prudently in achieving tangible results;
- Focus on customer satisfaction and collaborative decision making; and
- Demonstrate a commitment to excellence.

The accomplishments and the current status of the PORTS ER Program are summarized in this Management Action Process (MAP) document (Document). This document also presents a comprehensive strategy for management and remediation of contaminated environmental media and the decommissioning of PORTS facilities and structures. RCRA is the primary regulatory driver for PORTS.

1.1 PURPOSE OF MANAGEMENT ACTION PROCESS

The Management Action Process (Process) is designed to assist department and contractor management and technical personnel, regulators, and stakeholders in capturing, evaluating, and documenting information essential for programming, decision making, and implementing ER programs at PORTS. It provides a means for developing a common understanding of project status and strategy, understanding and evaluating ever changing project requirements, identifying project improvement or optimization opportunities, setting priorities and sequencing work activities, and identifying/resolving local and strategic issues. The Process, which includes a bottom-up review of all past and ongoing ER program activities at PORTS, provides a dynamic approach to developing effective ER strategies and resolving all environmental technical, operational, and administrative issues so that environmental actions can be effectively and expeditiously completed.

The Document is a result of the Process and incorporates recommendations developed therein. It represents a concise "snapshot" of the PORTS ER Program and includes a summary of past accomplishments, current status of the ER Program, as well as the future strategy, rationale, schedule, and funding requirements necessary to meet program objectives. The uniqueness of the Document is that it is a single, consolidated document that identifies the PORTS strategic course of action for restoration of the PORTS site. Like the process itself, the document is dynamic and will be updated regularly.

1.2 ORGANIZATION OF THE MANAGEMENT ACTION PROCESS DOCUMENT

The Document is organized into the following sections:

- Chapter 1 - Describes the mission, vision, and objectives of the PORTS ER Program; describes the purpose of the MAP and the organization of the document. This section identifies key participants in the Process, including department and contractor management and technical personnel, regulators, and stakeholders; describes the interrelations of the ER Program to other environmental management and department organizations, as well as interfaces with regulators, stakeholders, and the public. Also included is a summary of MAP accomplishments and a strategy for continuing the Process (i.e., steps used in implementing the Process together with a discussion of steps to follow), including planned process adjustments to improve the Process.
- Chapter 2 - Provides a description of site natural and physical characteristics, including its environmental setting and facilities, infrastructure, and equipment. It summarizes local community and regional social, economic factors influencing the site. It describes the operational history; current and adjacent site uses; and planned, proposed, or projected future uses of the land, facilities, and equipment.
- Chapter 3 - Summarizes the current status of ER program activities for contaminated sites and buildings, including identification of contaminant release sites, associated relative risk, status of assessment, and remediation efforts. It also describes the environmental condition of property and principal assessment, and remediation efforts. This section defines appropriate regulatory programs, under which contaminated sites are being addressed, and summarizes the history and status of other related elements of the PORTS ER Program including public participation, program management, support programs, etc.
- Chapter 4 - Presents a qualitative summary of relative risk to the public, site workers, and the ecosystem for each contaminated site and building.
- Chapter 5 - Describes the ER Strategy, including key assumptions and strategies for characterization, remedy selection, and regulatory compliance. Presents strategies and plans for defining, sequencing, and streamlining actions at individual contaminated sites. Summarizes strategies related to other elements including program management (e.g., funding), public participation, environmental justice, waste management, surveillance and monitoring, and technology development. Presents critical performance criteria for measuring the success of the ER program.
- Chapter 6 - Presents a master schedule of planned and anticipated activities to be performed throughout the duration of the ER Program; identifies regulatory compliance schedules and specific milestones.

- Chapter 7 - Identifies specific technical and administrative issues directly and indirectly affecting the PORTS ER Program to be addressed and resolved by the PORTS Project Team or higher authority, if necessary. This chapter also identifies special initiatives at PORTS will enhance ER Program efficiency.
- Appendix A - Provides cost and projected budgeted cost information for restoration and compliance projects.
- Appendix B - Presents a tabulated summary of the Environmental Restoration deliverables.
- Appendix C - Summarizes the history/description of selected remedial actions, performance standards or goals, and institutional controls for closed remediation projects.
- Appendix D - Presents conceptual models depicting contaminant sources, transport mechanisms, exposure pathways and routes, and receptors for contaminated sites exhibiting high relative risk.
- Appendix E - Summarizes project controls for the PORTS ER Program.

1.3 ENVIRONMENTAL RESTORATION OBJECTIVES

The ultimate objective of the PORTS ER Program is to remediate contaminated sites and decontaminate and decommission facilities in a safe, cost-effective, and timely manner to maximize beneficial reuse. The subsidiary objectives established to accomplish this overall goal are linked to the ER Strategic Plan. These objectives include:

Health and Safety Objective:

- Protect the health and safety of workers and the public by ensuring that risks posed by contaminated sites and facilities are eliminated or reduced to prescribed safe levels.

Regulatory Objectives:

- Conduct all ER program activities in a manner consistent with all state and federal regulations.
- Meet all requirements specified in the 1989 Consent Decree with the state of Ohio and the Administrative Order by Consent with U.S. EPA (amended 1994).

Technical Objectives:

- Identify sources, nature, and extent of contamination to allow more accurate determination of relative risk, scope, cost, and schedule of remediation projects.
- Classify and track all release sites and facilities by relative risk to human health, the environment, and worker safety. Through remediation, move higher relative risk release sites and facilities to a lower relative risk classification or into the “no further action” category.
- Remediate any off-site contamination that may pose risk to the public and environment.
- Contain contamination to prevent further migration of contaminants.

Operational Objectives:

- Sequence work based on a relative risk prioritization process.
- Reduce funding needs for the “core” program (i.e., essential costs required for landlord, program management, surveillance and maintenance, grants, and agreements-in-principle) over time to make available additional funds for risk reduction categories.

1.4 PROJECT TEAM

A Project Team has been established to implement the Process for PORTS. LMES is the contractor to the Department of Energy with overall responsibility for remediation and the conduct of site activities. The Process also considers active and constructive participation by regulators and stakeholders to be integral to the success of the Process. Therefore, the U.S. Environmental Protection Agency (EPA) and the Ohio Environmental Protection Agency (OEPA) represent the regulatory agencies with oversight responsibilities for PORTS ER on the Project Team. The PORTS stakeholder group on the Project Team include representatives from natural resource agencies, environmentalists, educators, community leaders and labor groups.

Table 1.4-1 lists the Project Team’s core members and key participants.

Table 1.4-1 Project Team

Core Team Members				
Role/Responsibility	Name	Title		
ORO-ERD	Bob Sleemen	Director, Environmental Restoration Division	DOE	(423) 576-0715
Portsmouth Site Office	John Sheppard	Site Program Manager	DOE	(614) 897-2331 x 5510
PORTS ER	Bob Barnett	ER Program Manager	LMES	(614) 897-2331 x 2700
PORTS ER	Gary Conner	WM Division Manager	LMES	(614) 897-2331 x 4016
PORTS ER	John Sokol	Manager, Action Process	LMES	(614) 897-2331 x 4426
PORTS ER	Tony Brothers	Project Team Leader	LMES	(614) 897-2331 x 3778
PORTS ER	Roger Gorres	Remedial Actions	LMES	(614) 897-2331 x 3206
PORTS ER	Don Igou	Long Term S&M and D&D	LMES	(614) 897-2331 x 2494
PORTS ER	Frank Anderson	Technical/ Groundwater	LMES	(614) 897-2331 x 2241
PORTS ER	Brenda Ramsey	Program Management Analysis	LMES	(614) 897-2331 x3435
PORTS ER	Sandy Childers	Public Relations	LMES	(614) 897-2331 x6312
PORTS ER	Gary Snyder	Manager, Technical Support Contractor	Jacobs	TBD
Program Manager	Jim Wagoner	HQ	DOE/EM-423	TBD
Region V	Gene Jablonowski	Remedial Project Manager	U.S. EPA	TBD
Ohio	Maria Galanti	Project Manager	Ohio EPA	TBD

1.5 ORGANIZATIONAL INTERFACES

The accomplishment of the PORTS ER mission and objectives requires guidance, oversight, and support of various Department of Energy and external organizations. The functions of these organizations, and their relationship to the ER Program are described in Figure 1.5-1.

The organizational interfaces of this organization are illustrated in Figure 1.5-1 and their roles and responsibilities are described in Table 1.5-1.

TABLE 1.5-1 Organizational Roles and Responsibilities

Organizational Unit	Role/Responsibility
PORTS Division Program Team	<ul style="list-style-type: none"> - Has been delegated overall authority by the Office of Environmental Restoration (EM-40) to ensure that (1) the ER mission is accomplished at PORTS and functions related to remediation are performed; (2) current status, problems, and potential issues are communicated regularly; and (3) internal and external inquiries and requirements receive response in a timely manner - Serves as the lead agency for remedial actions at PORTS
PORTS Site Office	<ul style="list-style-type: none"> - Responsible for accomplishing the PORTS ER mission - Oversees and manages the PORTS ER Program
Oak Ridge Operations Office	<ul style="list-style-type: none"> - Oversight responsibility for accomplishing PORTS ER mission - Supports PORTS Site Office in administration and finance and functions as a resource for problem solving using a team approach
LMES	<ul style="list-style-type: none"> - Conducts site remediation and management and operation of the site for the Department of Energy
USEPA	<ul style="list-style-type: none"> - Regulatory oversight of remedial actions at PORTS under Resource Conservation and Recovery Act (RCRA)/Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
Ohio EPA	<ul style="list-style-type: none"> - Oversight responsibility for compliance with the Resource Conservation and Recovery Act (RCRA), Clean Water Act, and Clean Air Act
DOE Waste Management Program	<ul style="list-style-type: none"> - Oversees management of wastes generated during remediation projects, including notification of projected needs for waste treatment, storage, and disposal
DOE Technology Development Program	<ul style="list-style-type: none"> - Ensures use of the fastest, safest, and most cost-effective technologies
PORTS Stakeholders Group	<ul style="list-style-type: none"> - Consists of approximately 45 individuals representing various segments of the surrounding communities, identified to assist in working with DOE, USEPA and OEPA on central issues regarding the PORTS ER Program - Includes locally-elected officials, economic development representatives, environmentalists, natural resource officials, community leaders, labor organizations, educators, health officials, plant neighbors and other interested citizens

1.6 STATUS OF MANAGEMENT ACTION PROCESS

The PORTS Environmental Restoration Program has progressed extensively in the past six years, in advance of many other DOE sites in the complex. DOE signed consent agreements in 1989 with both the State of Ohio and U.S. EPA to conduct RCRA Facility Investigations (RFI) remedial investigations and ensure the protection of the environment and public. Since that time, the entire federal reservation, spanning 3,714 acres, has been investigated and characterized with samplings from approximately 600 groundwater monitoring wells and over 400 soil borings. A second confirmatory phase of the site investigation was completed at the plant in 1994. Other investigations have also been completed in conjunction with the Resource Conservation and Recovery Act (RCRA) corrective action process. An air quality investigation, a baseline ecological risk assessment, and a study to determine background levels of naturally occurring radionuclides and metals have been completed to better assess environmental conditions surrounding the plant.

In addition to the investigative studies, a total of 13 closure projects (i.e., landfill caps, sludge lagoons, tank removals, waste storage facilities) have been completed under the Resource Conservation and Recovery Act and remedial actions are in process at three other units. Six interim remedial measures have been “fast-tracked” and completed to prevent any migration of groundwater contamination off-site.

A total of six groundwater treatment facilities are currently in operation, treating more than 20 million gallons of groundwater per year. One of these facilities utilizes an innovative passive groundwater treatment method to transport groundwater through a horizontal well by natural gravity flow to the treatment facility. The volatile organic compounds in the groundwater are then broken down by contact with a reactive media such as iron filings to eliminate the hazardous constituents.

The Project team has examined the existing data and investigation reports to provide an overall synopsis of the current status of the program and begin to work toward conceptual models for those site-specific units or areas to be completed. Regular internal Project Team meetings have been held to develop the initial drafts of the Management Action Process plan and to exchange information among the technical support personnel at the site.

1.7 STRATEGY FOR MANAGEMENT ACTION PROCESS

The PORTS Project Team meets regularly in conjunction with status/working meetings to discuss and resolve strategic and high-priority issues. Future meetings will typically be attended by Project Team representatives from DOE-PORTS, LMES, regulators, and stakeholders. Few Project Team meetings will require participation by all members. Rather the Project team will identify the appropriate participants needed to make decisions on specific meeting issues. The Project Team meetings will serve as a forum for assessing progress, obtaining consensus on problem issues, and eliminating confusion regarding PORTS environmental activities. Better communication among all parties will help eliminate duplication of effort and lead to decisions concerning how best to use limited resources. The Project Team concept and meeting goals are described next.

Project Team Concept

- Participation is need-driven
- Party with an issue is responsible for issue presentation
- Project Team goals are to conduct bottom-up review of all past and ongoing environmental programs at PORTS; compile and adopt recommendations for streamlining and/or otherwise expediting ongoing ER and restoration-related activities; and assemble and write the MAP Document
- Maintain program integrity, regularly update the MAP Document, and continue issue resolution on an as-needed basis

Project Team Meeting Goals

- Conduct elements of the bottom-up program review
- Resolve "global" technical operations and administrative issues
- Discuss modifications to agreements based on strategies that are developed
- Resolve technical issues identified during the MAP for:
 - Specific sites or Solid Waste Management Units (SWMUs)
 - Methodologies and technologies
 - Proposed cleanup plans and schedules
- Reach consensus on procedural, organizational, and operational issue:
 - Data Quality Assurance/Quality Control (QA/QC) analyses
 - Data validation, data quality assessment, and data management
 - Development of conceptual site or zone models and model summaries
 - Background contaminant concentration determination
 - Risk assessment protocols
 - Relative risk ratings for sites
 - Data gaps and information gaps
 - Improved contracting approaches
 - Schedule modification

The following issues will be considered for inclusion as action items and prioritized by the Project Team during fiscal year (FY) 1996 and/or subsequent meetings:

- Discuss the MAP and its implementation through Project Team meetings;
- Prioritize and assign action items;
- Evaluate and determine the relative risk associated with each SWMU and quadrant;
- Review long-term costs associated with “core” program activities, including program management and maintaining surplus facilities, and identify potential opportunities to reduce these costs;
- Review key program assumptions and develop contingency plans to address changes in key assumptions;
- Evaluate emerging technologies;
- Review the Consent Agreements schedules to streamline;
- Review the comprehensive Master Schedule to determine related compliance projects which should be better defined or added;
- Perform periodic updates and modifications as needed and identify opportunities for combining remedial activities or for critical-path concerns;
- Evaluate progress and status in identifying and addressing data gaps;
- Review contracting strategy for planned remedial design/remedial actions; and
- Review upcoming projects.

2.0 SITE DESCRIPTION AND COMPREHENSIVE PLANNING

2.1 OPERATIONAL HISTORY

The Portsmouth Gaseous Diffusion Plant (PORTS) effectively had its conception in June 1951, when the Atomic Energy Commission (AEC) began design studies that would lead to the construction of a gaseous diffusion plant that could be added to the Oak Ridge–Paducah complex and provide ^{235}U production at concentration rates substantially above those of the existing complex. In 1952, AEC selected the existing PORTS site in rural south central Ohio (U.S. Energy Research and Development Administration 1977a, Table 2.1-1 Operational History). The regional location of PORTS is shown in Figure 2.1-1.

The PORTS site currently consists of the 3714 acres remaining from an original 4000-acre purchase. The initial property acquisition included over 50 separate parcels consisting of small farms, pastures, and timberland. Construction of the plant began in late 1952. Production of enriched uranium began in 1954. The plant utilizes the gaseous diffusion process to enrich uranium from a natural state of less than 1% ^{235}U to increase concentrations varying from 2 to 5% ^{235}U for use as fuel for nuclear power generation. From startup through November 1986, PORTS was operated for DOE by the Goodyear Atomic Corporation. PORTS was then managed by Martin Marietta Energy Systems, Inc., (MMES) up to the current lease agreement with the U.S. Enrichment Corporation (USEC).

PORTS was chosen in the late 1970s as the site for the construction of a new uranium enrichment facility utilizing gas centrifuge technology. A site immediately southwest of and adjacent to existing facilities was selected, and construction of the Gas Centrifuge Enrichment Plant (GCEP) began in 1979. Construction was intended to provide 8 process buildings, for a total of more than 35 permanent buildings upon completion. However, construction of this facility was halted in the summer of 1985 because of a decrease in demand for enriched uranium and a decision that laser technology held greater promise for more efficiently and economically supplying future demands for enriched uranium. Some of the completed GCEP buildings are currently being utilized by PORTS operations, USEC, the Defense Logistics Agency (DLA), and the Ohio National Guard, while others remain available for use.

On July 1, 1993, the Energy Policy Act of 1992 transferred the management of the uranium enrichment enterprise at PORTS from DOE to USEC. To meet the needs of this reorganization, the Martin Marietta Energy Group formed Martin Marietta Utility Services, Inc., (MMUS) to operate and maintain the USEC operations. In March of 1995, Martin Marietta merged with Lockheed Corporation to form Lockheed Martin. Hence, MMES is now LMES (Lockheed Martin Energy Systems) and MMUS is now LMUS (Lockheed Martin Utility Services). LMES at PORTS now manages the Environmental Restoration (ER) Program, which includes Waste Management (WM) activities and uranium enrichment landlord activities for DOE.

The uranium enrichment process and associated support activities at PORTS result in the generation of low-level radioactive wastes (LLW), RCRA hazardous wastes, TSCA wastes, mixed wastes (RCRA and TSCA wastes mixed with radioactive wastes), and solid wastes. No high-level radioactive wastes are generated or stored at the PORTS site. In days past, contaminants from material processing and related activities were released to the environment through air emissions, wastewater discharge, storm water runoff, and leaks and spills. In 1995, the RCRA hazardous waste storage facilities in the X-7725 and X-326 buildings received a RCRA part B permit to store waste.

Table 2.1-1 Operational History

PERIOD	TYPE OF OPERATION	HAZARDOUS SUBSTANCE ACTIVITIES
1952	Atomic Energy Commission (AEC) announces expansion of uranium enrichment program. Site of a new gaseous diffusion plant to be constructed in Pike County, Ohio. Goodyear selected as operating contractor for the plant. First construction begins.	Construction
1954	Prime construction contractor releases first buildings. First cascade units placed into operations. First product withdrawal made.	Construction, Operations
1954 to Present	Operation of gaseous diffusion plant is at Portsmouth site.	Operations
1956	Last building released from construction. Plant in full operation.	Construction, Operations
1956 to Present	Various major diffusion plant construction activities on site including construction of test loop building, uranium oxide conversion facility, Process Equipment Modification Program (PEMP), Cascade Upgrading Program (CUP), Cascade Improvement Program (CIP), and process motor refurbishment.	Construction
1975	Functions of AEC divided between Nuclear Regulatory Commission (NRC) and the Energy Research and Development Administration (ERDA). Responsibility for uranium enrichment assigned to ERDA.	NA

Table 2.1-1 Operational History

PERIOD	TYPE OF OPERATION	HAZARDOUS SUBSTANCE ACTIVITIES
1977	Functions of the ERDA transferred to the new U. S. Department of Energy. Portsmouth Gaseous Diffusion Site selected for construction of the new Gas Centrifuge Enrichment Project (GCEP) facilities.	NA
1978	Construction of the GCEP facilities begins.	Construction
1983	First testing operation of GCEP machines with uranium hexafluoride takes place.	Operation
1985	DOE announces intent to halt construction of GCEP.	NA
1983 to 1985	Limited construction/testing of GCEP machines at Portsmouth site.	Construction/Testing
1986	Operation of the Portsmouth site contract is assumed from Goodyear by Martin Marietta Energy Systems	NA
1988	GCEP marketing results in the Ohio National Guard lease GCEP Mobile Equipment Garage. The Defense Logistics Agency (DLA) takes over the GCEP process facilities.	Operations
1992	Energy Policy Act of 1992 creates the United States Enrichment Corporation (USEC).	NA

Table 2.1-1 Operational History

PERIOD	TYPE OF OPERATION	HAZARDOUS SUBSTANCE ACTIVITIES
1993	USEC takes over responsibility for uranium enrichment program and leases plant facilities dedicated to that mission from the DOE. DOE retains responsibility for Environmental Restoration and Waste Management (ERWM) for its operations at the site prior to 1993. Martin Marietta Energy Systems remains under contract to DOE to perform ERWM. Martin Marietta Utility Services, a new subsidiary of Martin Marietta Corporation, is assigned responsibility for operation and maintenance of enrichment operations under contract to the USEC.	Operations
1995	Martin Marietta Corporation changes its name to Lockheed Martin as a result of a merger between the Martin Marietta and Lockheed Corporation. First application for certification of the enrichment operations is submitted to the U.S. Nuclear Regulatory Commission (NRC).	NA

2.3 CURRENT AND ADJACENT SITE USES

2.3.1 Current Site Land Use

Many of the 3714 acres on the Portsmouth reservation are being utilized or, with a few exceptions, have been assigned to a land use category. The 2508 acres outside the 1200-acre core are being used for a variety of purposes, including the water treatment plant, the lagoons for the Process wastewater treatment plant, and the sanitary and inert landfills. The 1200-acre core comprises all facilities and land at PORTS that are located inside the perimeter road. The majority of the 1200-acre core is leased to the U.S. Enrichment Corporation (USEC) through 1999 (see Fig. 2.3-1) with USEC retaining the first right of renewal or refusal.

Primary entrances are located north and west of the core site. The northwest quadrant is devoted primarily to waste storage and disposal. Most of the improvements are located in the 1200-acre fenced core area. This area is largely devoid of trees and grass, having been paved or left bare. Within this area are the three Process buildings, each about 882 ft by 1781 ft and 70 ft tall. The Process buildings also account for 8 million sq. ft. of PORTS's total 10 million sq. ft. of floor space, exclusive of the facilities originally constructed for the GCEP mission. Figures 2.3-2 and 2.3-3 show the current land uses and layout of the site.

2.3.2 Adjacent Land Uses

Woodland comprises 54% of the area surrounding the Portsmouth site, making forests the predominant land use. Agricultural usage ranks second, at 41.3%. Overall, these two uses account for more than 95% of land usage in the area. Land use for the four-county area is shown in Table 2.3-1.

Table 2.3-1 Land use in the four-county PORTS area

County	Total acreage	Land use				
		Forest	Agricultural	Industrial	Commercial	Residential
Pike	285,100	60% (171,060 acres)	37% (105,000 acres)	0.15% (436 acres)	1.1% (3,220 acres)	0.5% (1,560 acres)
Ross	443,000	32.3% (143,089 acres)	63.5% (281,000 acres)	0.79% (3,500 acres)	0.36% (1,595 acres)	1.86% (8,240 acres)
Scioto	385,500	72.6% (286,500 acres)	22.6% (89,330 acres)	-----0.6%----- (2,500 acres)		1.81% (7,144 acres)
Jackson	270,500	55.5% (150,000 acres)	37% (100,000 acres)	-----5%----- (13,525 acres)		2% (5,410 acres)

Figure 2.3-1

To be inserted later, not scanned

2.4 INFLUENCING FACTORS

The efficient and cost-effective remediation of the PORTS site and its relationship to future uses hinge on the recognition and proper address of various influencing factors, including an understanding of environmental, social and human, economic, and long-term management impacts. A summary of these factors is presented in this section.

2.4.1 Economic Factors

Acceleration of cleanup schedules or cessation of enrichment operations with subsequent D&D could, by its increase in the need for workers and services, affect the development rate within the sub-regional area. The magnitude and duration of this impact could not be estimated here. Local economic sustainability is a consideration for the site by deliberate involvement of local government officials, community and business leaders, employees from the plant, and other interested citizens.

Pike County and the three adjoining counties closest to PORTS (i.e., Ross, Scioto, and Jackson) are largely rural (Fig. 2.4-1). The largest city in each county contains less than 32% of the people living in that county, and over 90% of each county's land is either forest or farmland. Overall, the four-county region is expected to experience an increase in population; the rural nature of the region will persist.

Housing and public services in the four counties are adequate for the present population. Moreover, there appears to be no constraints associated with expanding housing and services should the region's population and economic base increase rapidly.

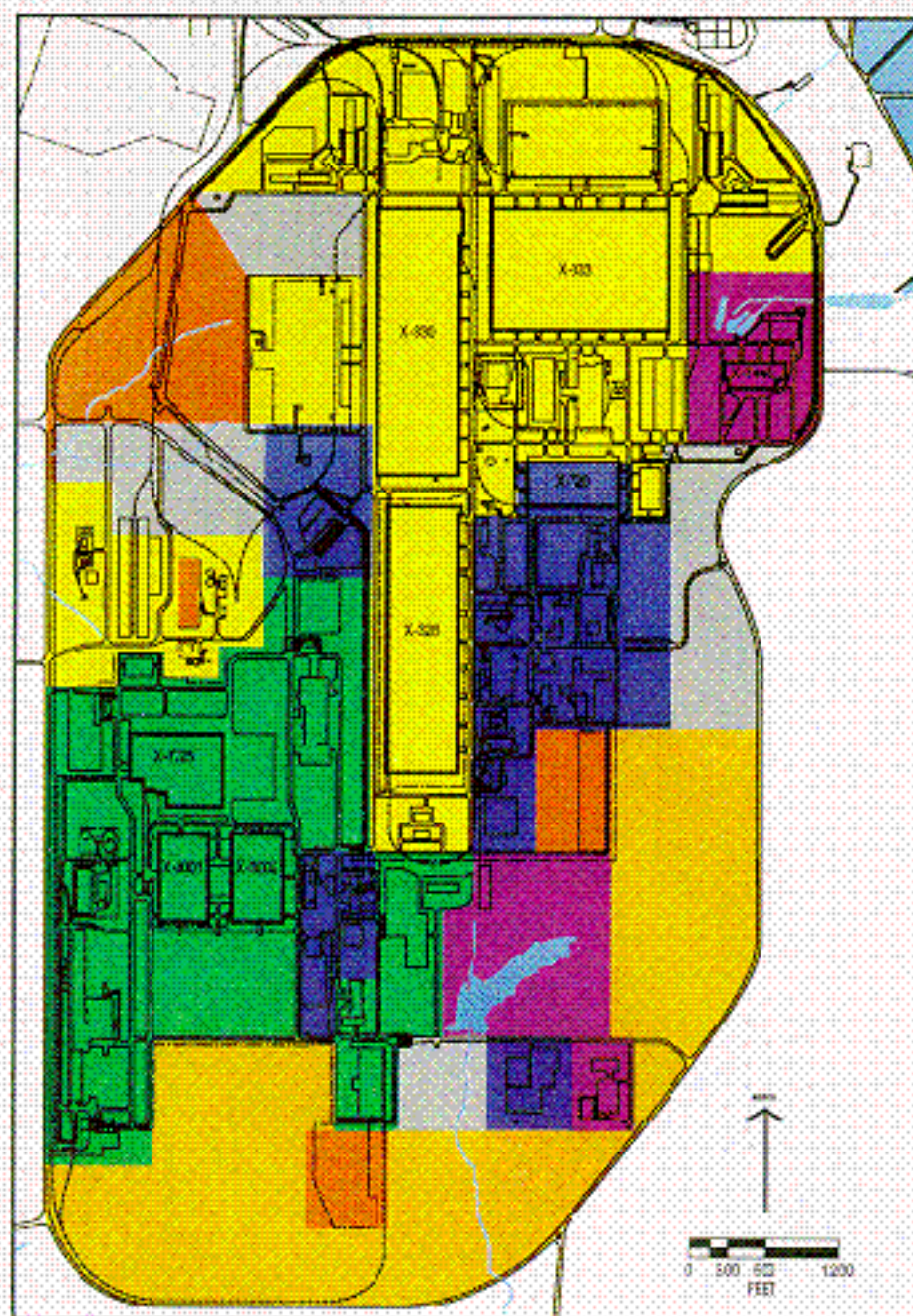
In 1989, per capita incomes in the four counties were significantly below those of Ohio and the nation, and unemployment rates were higher. Education levels (i.e., high school and college) are lower than both state and national levels. Services employ the greatest percentage of people in the region (6.8%), followed by manufacturing (6.3%) and retail trade (4.0%). Industry in the region is not broad-based, and efforts to attract new industry to the area have met with limited success. Continued operation of the uranium enrichment facility is widely considered to be one of the community's top economic priorities.

2.4.2 Social Factors

The most predominant influencing social factor for the site is the continuation of enrichment operations at the plant. Significant changes to population, employment composition, worker dislocations, and economic trends are not anticipated. However, social factors relating to surrounding property values, and potential disproportionate local burdens (environmental justice) from the remediation at the PORTS site, and the resulting impacts should be identified and considered in the development of cleanup plans.

Perceived Health Risks- The contamination of the site over its operational lifetime led some people in the local area to develop a visceral feeling that there is major and chronic risk to their health from the contamination on and under the site. This is not as significant at the Portsmouth site as at other DOE sites.

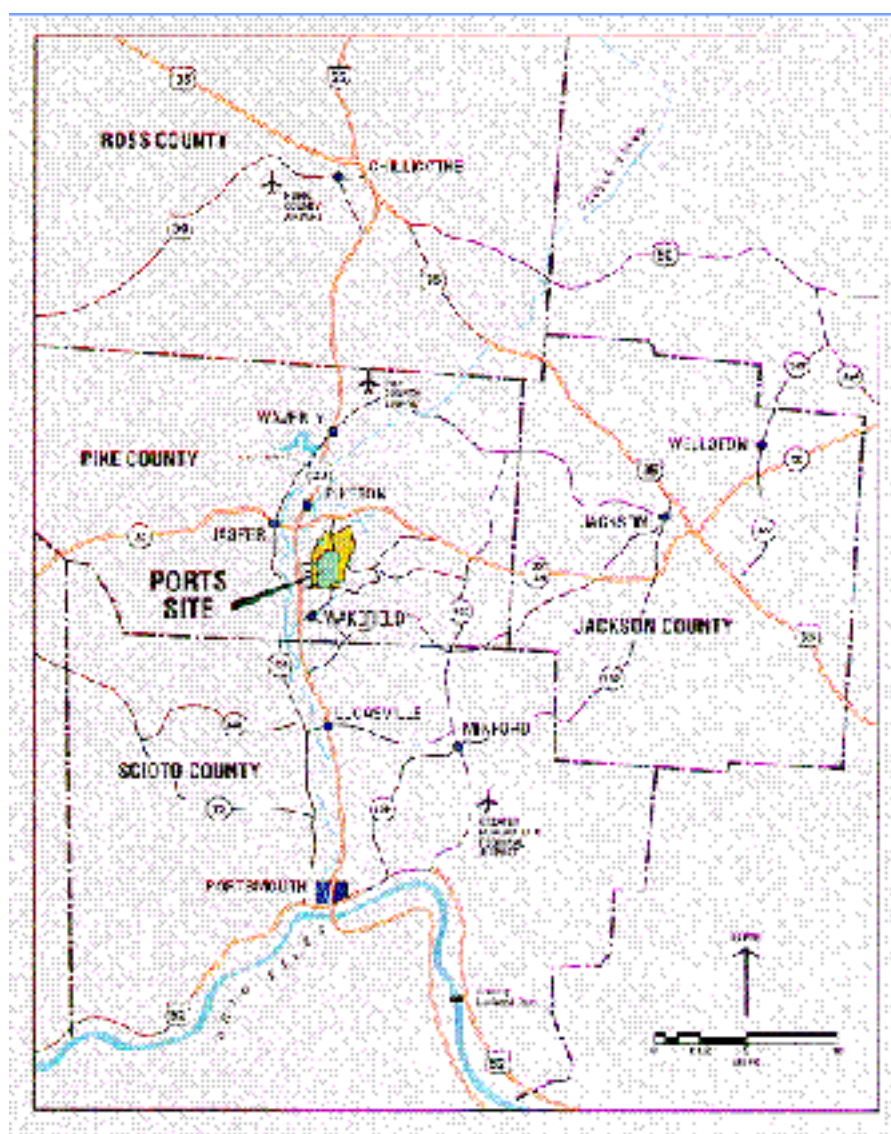
Figure 23-3



LEGEND

WASTE MANAGEMENT
PROHIBITED
LESSEE
BUFFER

GDP PRODUCTION/PRODUCTION
SUPPORT
GENERAL SITE SUPPORT
VACANT



Potential Disproportionate Local Burdens- Executive Order 12898 requires each federal agency to identify and address disproportionately high adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. Community Characteristics or Site-Specific Demographic Assessments are needed to determine a disproportionate impact from the site's contamination and cleanup.

Property Value Impacts- There is usually a perception that the value of private property near a nuisance or nonconforming land use like a nuclear facility is adversely affected by the direct and indirect impacts of nuclear facilities. However, at PORTS, the perception of the value of private property seems to be positive. Currently, new homes are being built within two miles of the site.

Community Concerns and Response- The public's knowledge of the site and the enrichment complex as a whole has increased tremendously since the mid-1980's. The increased knowledge has resulted largely from information submitted to local interested parties in an attempt by the DOE to better inform the public. Residents of the community are not complacent about environmental issues; however, as a whole they are also not apprehensive about environmental and safety-related matters at the enrichment plant. Only one organized protest has taken place, and that was two decades ago by a group from outside the local area. However, in 1990, a class action suit was filed by eight individuals against plant operators, alleging adverse health impacts within a six-mile radius of the facility. The suit is scheduled to go to trial June 3, 1996, in Federal District Court. Overall, community officials describe the relationship between the community, DOE, and USEC as cordial and cooperative. Plant employees support area retailers and have made substantial contributions to charitable programs in the community. The relationship between DOE, USEC, LMES, LMUS, and the community is generally positive as a result of the aforementioned factors, and the facility's provision of emergency equipment and assistance, its safe operating record, and the open communications it has engendered through plant tours and periodic open houses. The community has demonstrated its support of DOE and USEC projects through favorable local government resolutions, individual and organizational contributions toward the purchase of land needed by DOE, and grass-roots community support expressed at public meetings.

2.4.3 Cultural Factors

This section discusses the condition and implications of the cultural factor on the land use management and planning needs of the Portsmouth site. Though an operating enrichment site, significant impact to historical properties as a result of Environmental Restoration is not expected to occur. In any event, field surveys on any areas to be disturbed by construction activities will occur through the National Environmental Policy Act (NEPA) process.

The past absence of strong development pressures in the plant vicinity has been identified recently as one possible reason for the area's retention of its present character as reflected through its architecture and land use. A number of significant archaeological and historic resources remain in the area, both registered and as yet unrecorded (new archaeological sites).

Only one site of historical importance, Mt. Gilead Cemetery, has been identified within the boundary of the reservation. However, several sites exist within a three-mile radius of the Portsmouth site. A list of these sites is as follows: Mound Cemetery, Indian Mound, Van Meter Farm, Daley Cemetery, Hold Cemetery, Daniels Cemetery, Hawk Cemetery, Haskind Cemetery, Bailey Chapel, and Bailey Chapel Cemetery. Under directions from the Ohio Historic Preservation Office, information about potential archaeological sites is being withheld to protect them from exploitation.

2.4.4 Environmental Factors

The site's environmental sustainability goals are the long-term endpoints for this portion of the area's ecosystem. They will also further guide and support the stakeholder-based long-term land use decisions for the site. Current environmental sustainability goals are overshadowed by the presence of the operating enrichment facility. Current environmental remediation activities are intended to study, characterize, correct, and return legacy environmental contamination to a stable state. Goals for the site's environmental sustainability following cessation of enrichment operations, should it occur, have not been fully examined.

Changes to the conditions of the local and regional environment are usually difficult to discover unless they are significant. They are often observed in changes to an individual species' population but are often the result of changes in habitat composition or a response to local and regional development trends, or the suppression of wild fires, or changes in agricultural practices, and incremental weather/climatic change. When changes occur in an ecosystem, what is observed is the response(s) of a complex, self-regulating system that will always be responding to the change and does not lend itself to being isolated and studied on a laboratory bench.

2.4.5 Other Factors

Other factors, in addition to those factors already described, include:

- **Long-term safety:** Effectiveness of available technologies over time and long-term monitoring and ownership of the Portsmouth property are seen as crucial to the long-term acceptability of any remediation scenario.
- **Short-term risks:** Risks to workers and residents resulting from the remediation activities themselves are of paramount concern.
- **On-site disposal requirements:** The volume of waste generated by Environmental Restoration and the ultimate disposal of the waste will greatly determine the overall impact of the remediation on local communities during and after construction.
- **Impact on natural resources:** Excavation of contaminated soil present at Portsmouth could have a significant impact on the flora, fauna, sensitive habitats, farmlands, and wetlands that comprise the Portsmouth site and surrounding properties.
- **Transportation and off-site disposal requirements:** The Department must be sensitive to the impacts on and potential risks to communities along transportation routes and at the ultimate disposal facility.
- **Community impacts and benefits:** Disruption of adjacent communities and the long-term economic, social, and aesthetic impacts on those communities as well as the PORTS workforce are of significant importance.
- **Cost:** As a taxpayer-funded project, the total cost of remediation is important. Department budget

projections indicate real limitations on available resources in the future.

2.5 FACILITIES, INFRASTRUCTURE AND EQUIPMENT

2.5.1 Major Facilities

Most major PORTS production, maintenance, administrative and technical support, and warehousing facilities are leased to USEC for the gaseous diffusion operations. These facilities are tabulated in Table 2.5-1 and highlighted in Figs. 2.5-1 through 2.5-4. Significant facilities retained by DOE are listed below.

- The *special nuclear material storage building* (X-345) is a reinforced concrete vault structure that provides maximum security protection for these materials prior to shipment off-site.
- Covering about 7 acres, the *X-3001 and X-3002 buildings* are one-story structures except for equipment and utility mezzanines at the north and south ends. Both buildings contain four bays 100 ft wide by 630 ft long, with room for a rigid-mast bridge crane. A covered transfer corridor connects these buildings to the X-7725 building.

Maintenance Facilities- Three large facilities—the X-700 cleaning building (128,800 sq. ft), the X-705 decontamination building (100,800 sq. ft), and the X-720 maintenance and stores building (312,000 sq. ft)—provide most of the equipment maintenance support for the diffusion cascade. Equipment (compressors, motors, etc.) removed from the cascade is disassembled and decontaminated in X-705, which also houses equipment for the recovery of uranium from decontamination solutions. The major maintenance shops are located in X-720 (compressor shop, motor shop, etc.), which also contains a large stores area and offices.

DOE's building X-7725 is a multi-story structure currently serving as a waste storage facility and office complex. This large building is 540 ft by 820 ft and almost 17 stories tall.

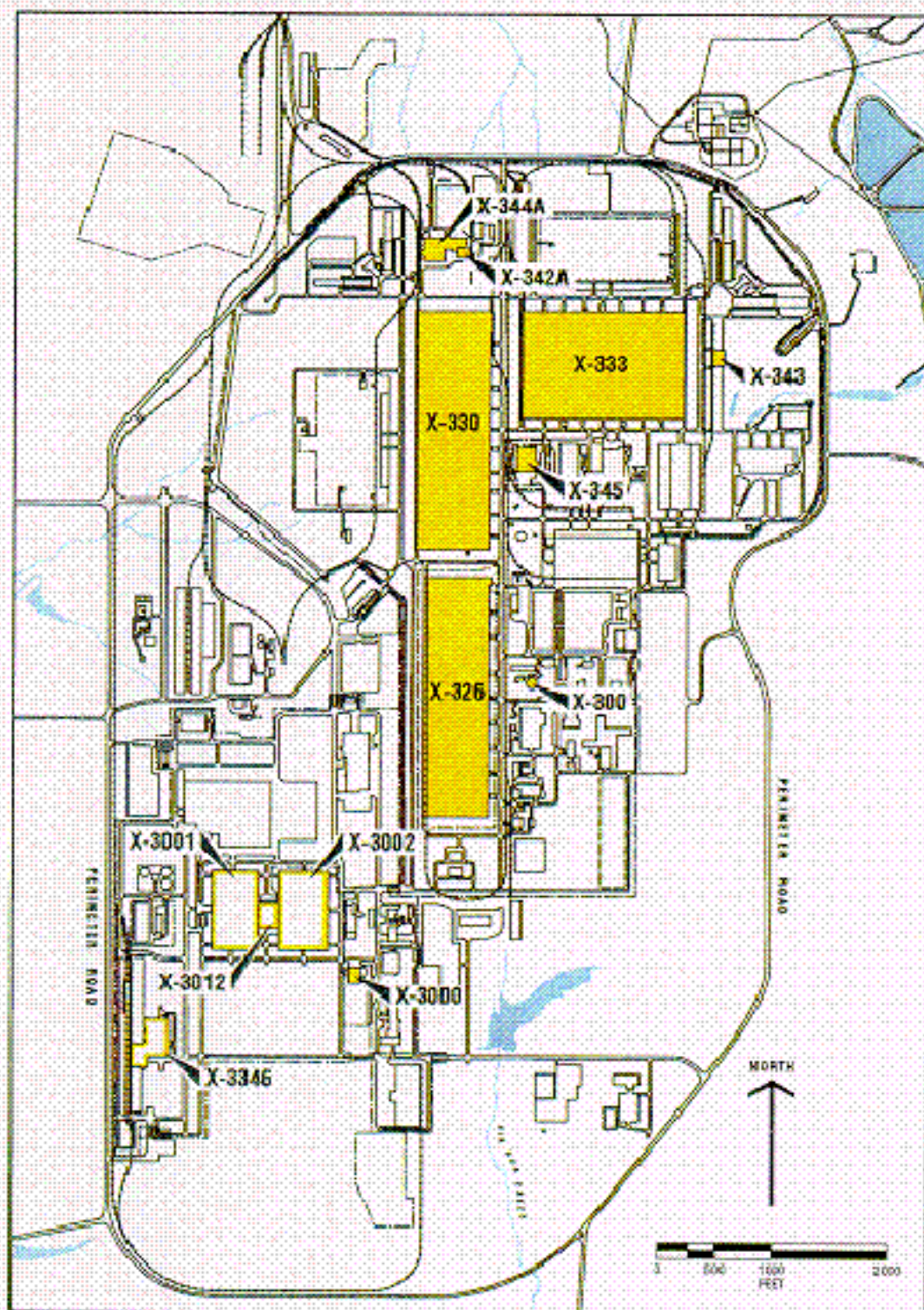
Administrative and Technical Support Facilities- Administrative and Technical Support Facilities are shown in Figure 2.5-3.

Receiving and Warehousing Facilities- Various warehouses are used on the site for storage of parts and materials needed for plant operations, waste storage, and surplus materials. These facilities are shown in Figure 2.5-4.

DOE has declared surplus to its needs approximately 62 million pounds of processed lithium hydroxide monohydrate. A sales subcontract was entered into between Lockheed Martin Energy Systems and a private corporation to purchase the lithium currently stored in warehouses at PORTS. The preliminary schedule indicates that all lithium hydroxide monohydrate should be shipped off-site by July 2001. As a result of this sale, the seven current storage warehouses would become available for future missions.

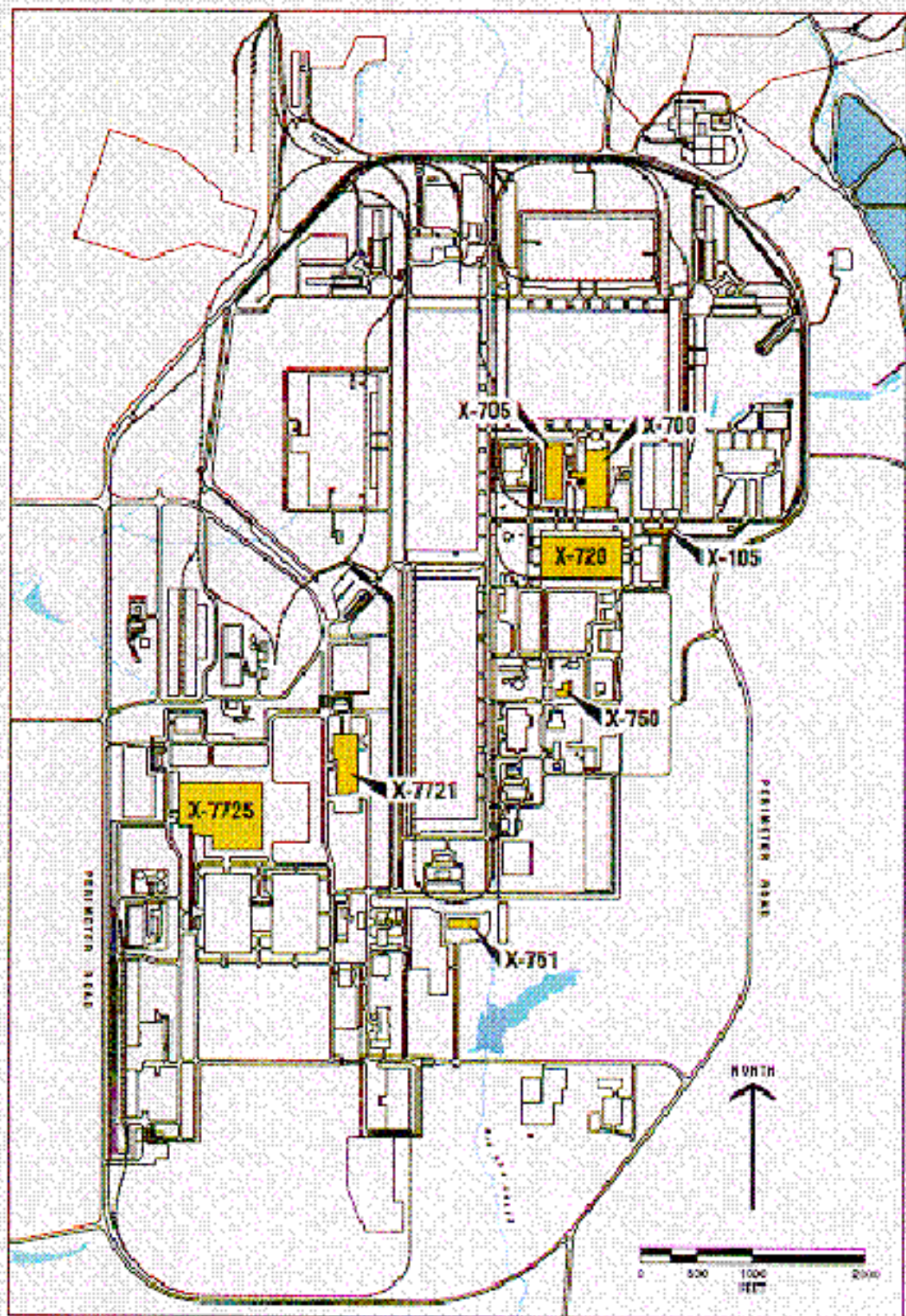
Table 2.5-1 Major Facilities

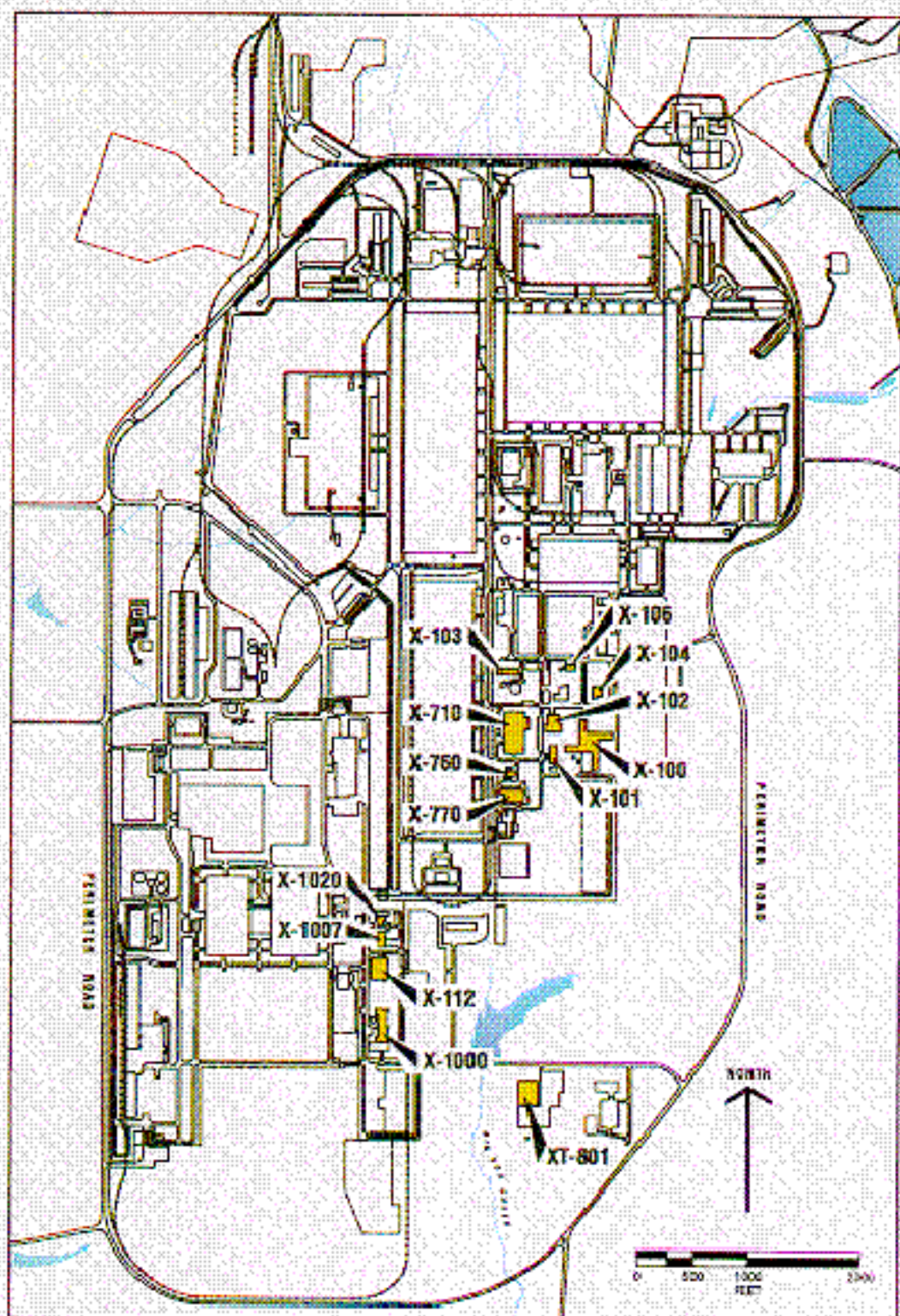
FACILITY	FUNCTION	OWNERSHIP
X-330, X-333, X-326	Gaseous diffusion process buildings	Leased to USEC
X-345	Special nuclear material storage building	DOE
X-3001	Offices and storage	DOE
X-3002	Occupied by Defense Logistics Agency (DLA)	DOE
X-700	Cleaning building and welding shop	Leased to USEC
X-705	Decontamination building	Leased to USEC
X-720	Maintenance and stores building	Leased to USEC
X-7725	Office complex and waste storage building	DOE
X-7721	Maintenance, stores and training (MST) building	Leased to USEC
X-100	Administrative and technical support building	Leased to USEC
X-1000	Administrative and technical support building	Leased to USEC
X-3346	Occupied by the Ohio Army National Guard	DOE
X-744K,N, P, Q, S, T,& U	Lithium hydroxide warehouses	DOE
X-744G	Storage of Uranium Bearing Material	DOE
X-745C & X-745E	DUF ₆ cylinder storage yards	DOE
X-747H	Contaminated scrap storage yard	DOE
X-747G	Contaminated materials storage yard	DOE
X-530, X-533 & X-5000	Electrical switchyards	Leased to USEC
X-611	Water treatment plant	Leased to USEC
X-6619	Sewage treatment plant	Leased to USEC
X-600	Steam plant	Leased to USEC
X-7745R	Low-level waste storage yard	DOE
X-2230M & N	Holding ponds	DOE
X-230K, L, J5 & J7	Holding ponds	Leased to USEC
X-735	Sanitary Landfill	DOE

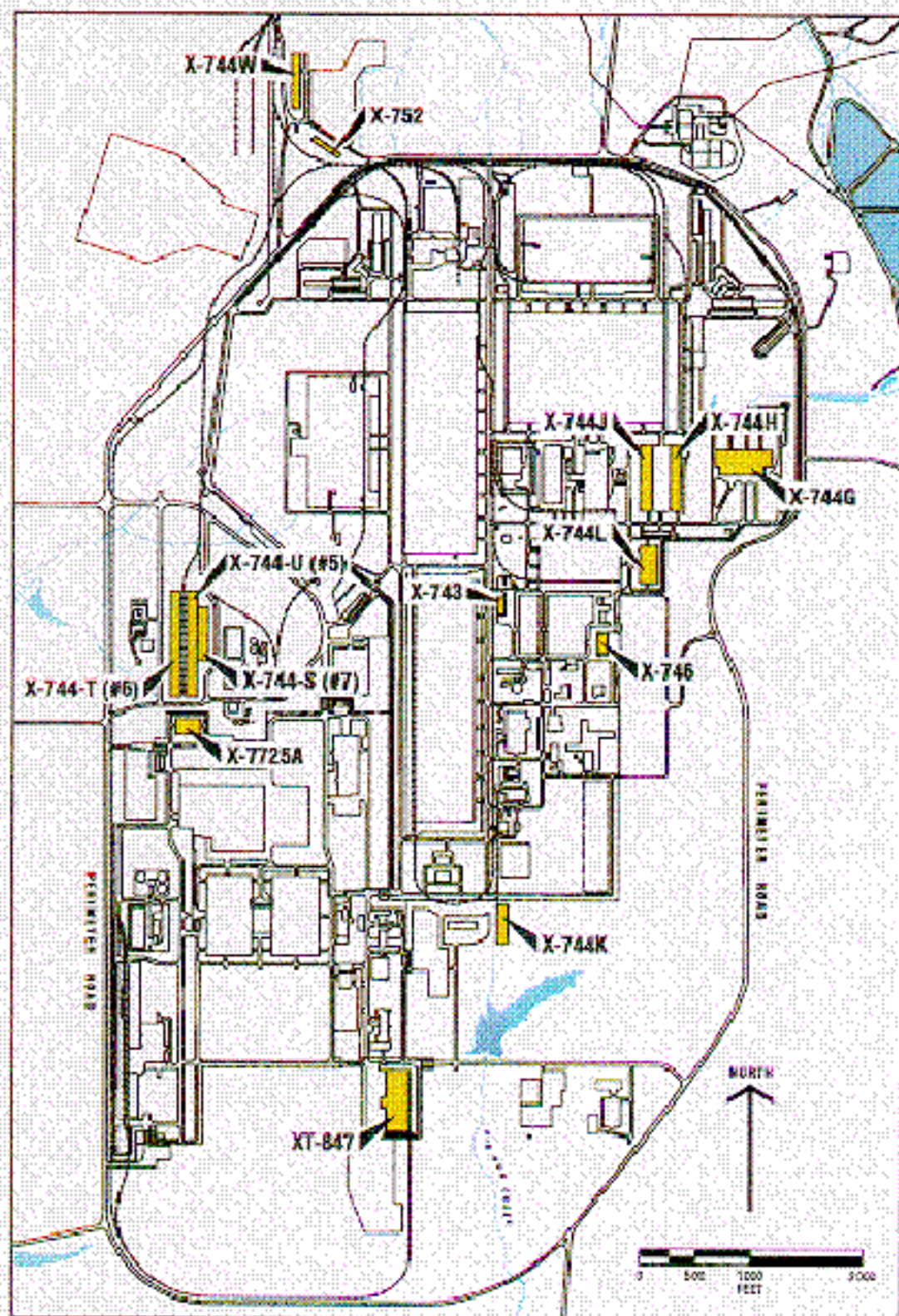


LEGEND

- PRODUCTION FACILITIES
- INACTIVE PRODUCTION FACILITIES







Open Storage Yards- Open storage yards (Fig. 2.5-5) are currently used to meet three primary storage requirements: (1) UF₆ cylinder storage, (2) storage of contaminated and/or classified scrap material, and (3) coal storage. All principal UF₆ cylinder storage yards are paved with concrete.

Four major open storage areas contain scrap materials that are separated for potential reclamation and reuse or stored because their sale or disposal is complicated by security classification or low-level uranium contamination. The south contaminated materials storage yard (X-749) has a large quantity of buried scrap materials, primarily ferrous (piping, converter shells, etc.), from the completed Cascade Improvement Program/Cascade Upgrading Program (CIP/CUP). X-749 has undergone RCRA closure. This material cannot be reclaimed since it is buried. Northwest of the plant site and outside the secured area, the fenced-in northwest surplus and scrap yard (X-747H) contains unclassified, but slightly contaminated scrap. In an area directly southwest of the X-744G warehouse, classified scrap material (converter tube sheets sealed in scrap converter shells) is stored. This area contains approximately 7600 tons of ferrous scrap slightly contaminated with uranium. North of X-744G, semiprecious metal scrap (primarily copper) is stored within the fenced northeast contaminated materials storage yard (X-747G) area. This slightly contaminated material was generated primarily during CIP/CUP.

The X-747F miscellaneous material storage yard, a large area located in the core of PORTS, is now largely empty. Most of the scrap previously stored here was relocated to X-747H. Because of its central location and its size, this land could be used for permanent development in the future.

The X-7745R and X-600A open storage areas have dedicated uses and encompass large tracts of land. Covering approximately 6 acres, X-7745R is used to store drums and boxes of low-level and non-hazardous waste. The X-600A coal yard, adjacent to the X-600 steam plant, covers approximately 5 acres and has a total storage capacity of approximately 40,000 tons.

2.5.2 Transportation Systems

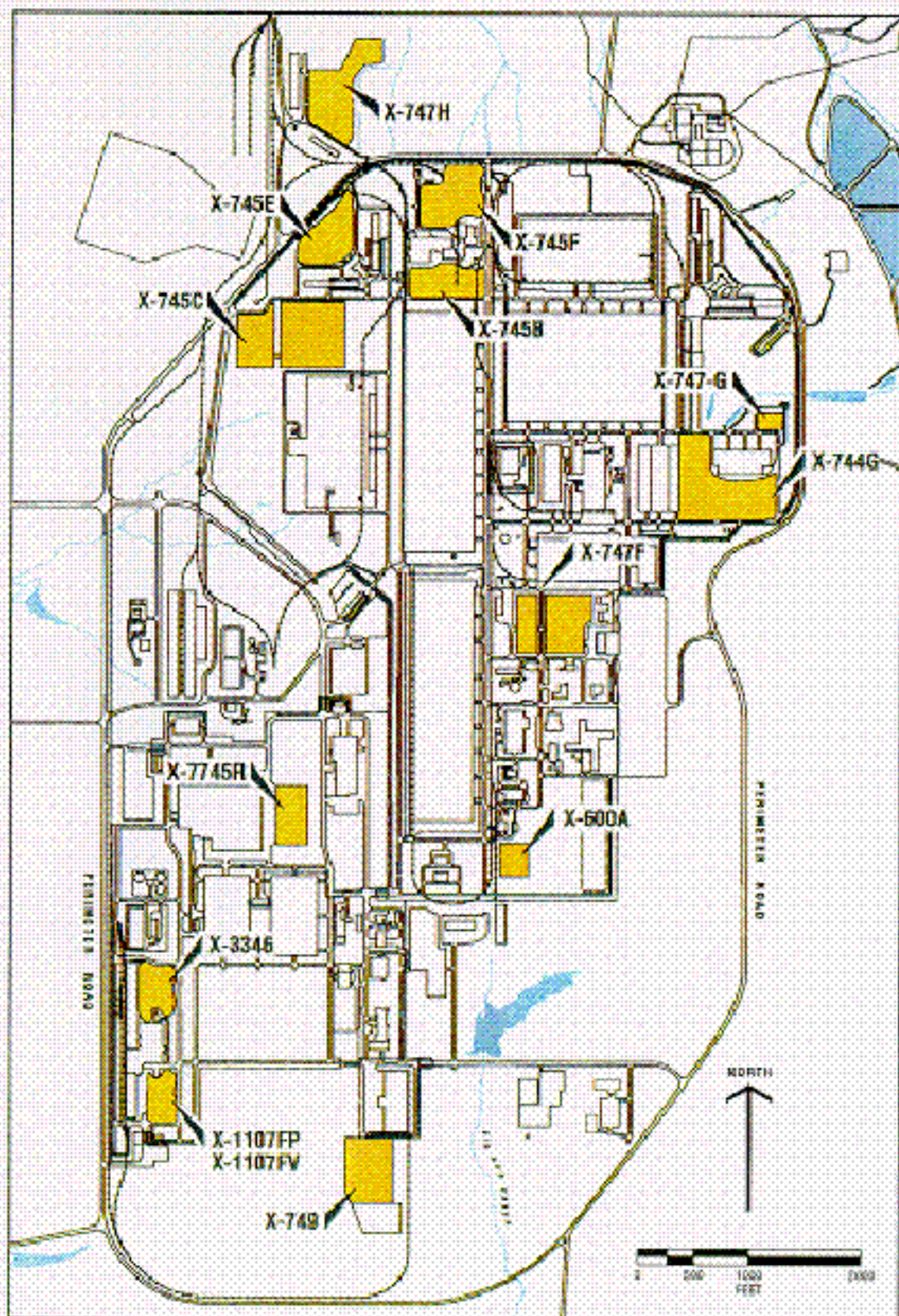
Transportation at PORTS centers on the intrasite road and rail networks. These are highlighted in Figure 2.5-6.

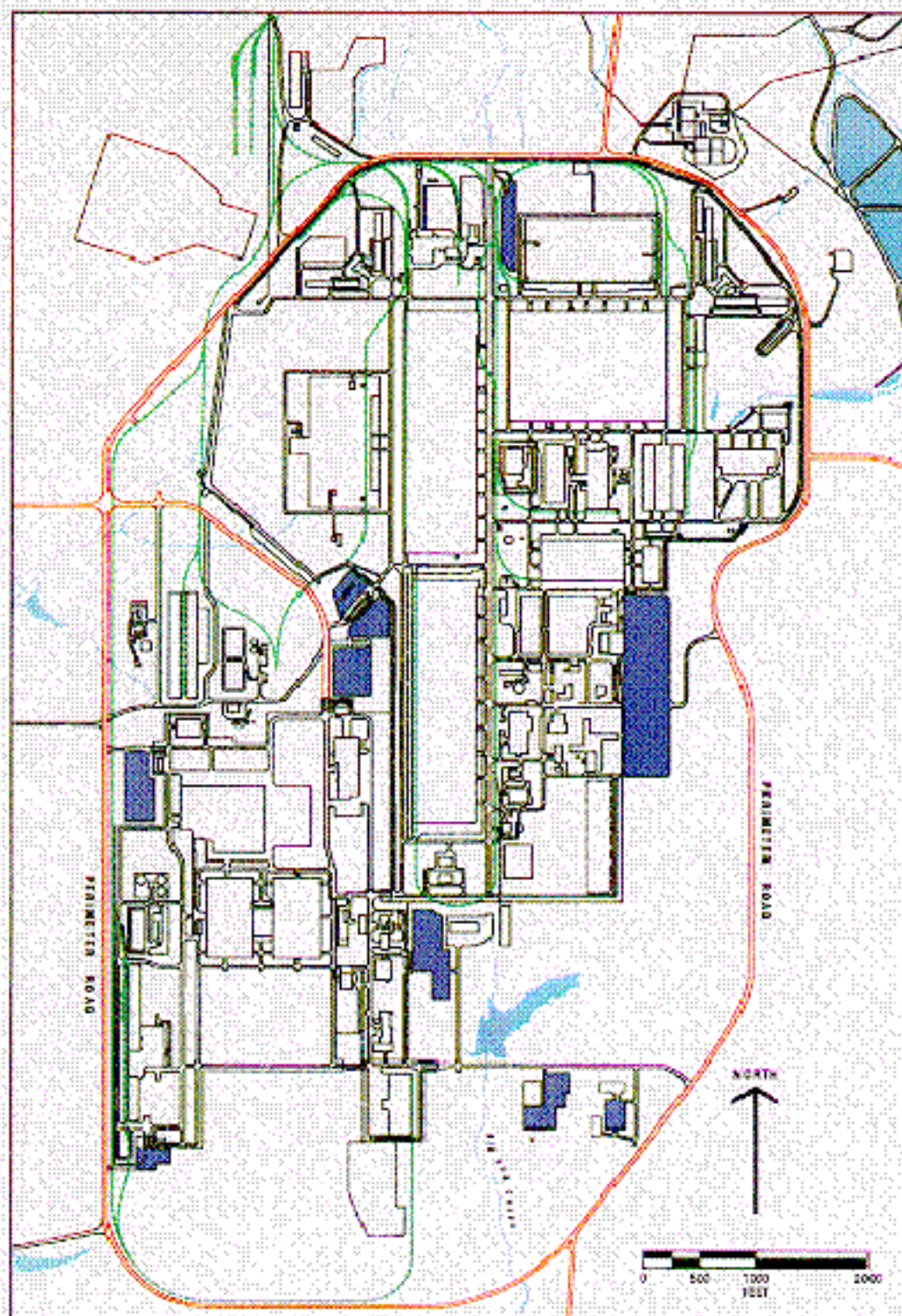
2.5.3 On-Site Utilities

PORTS has an intricate utility system to supply electric power, water needs, steam, compressed air, nitrogen, and communications to the various plant operations.

Electricity Supply Systems- Electric power is supplied by the Ohio Valley Electric Cooperative (OVEC) through ten 345-kV transmission lines which are owned and maintained by the utility. All power is received at two 345-kV switchyards, X-530 and X-533 located at the site. Figure 2.5-7 shows the location of the switchyards and the incoming high-voltage power lines. Two of the above lines are derived from one 765-kV transmission line at OVEC's local Don Marquis Substation, which also has two additional 345-kV incoming transmission lines. PORTS does not have on-site generating capability.

Raw Water Supply and Treatment- Raw water is transmitted from four well fields (X-608A, X-608B, X-605G, and X-6609) to the X-611 water treatment plant. If the well fields cannot produce enough water for plant needs, water is pumped from the Scioto River at X-608.



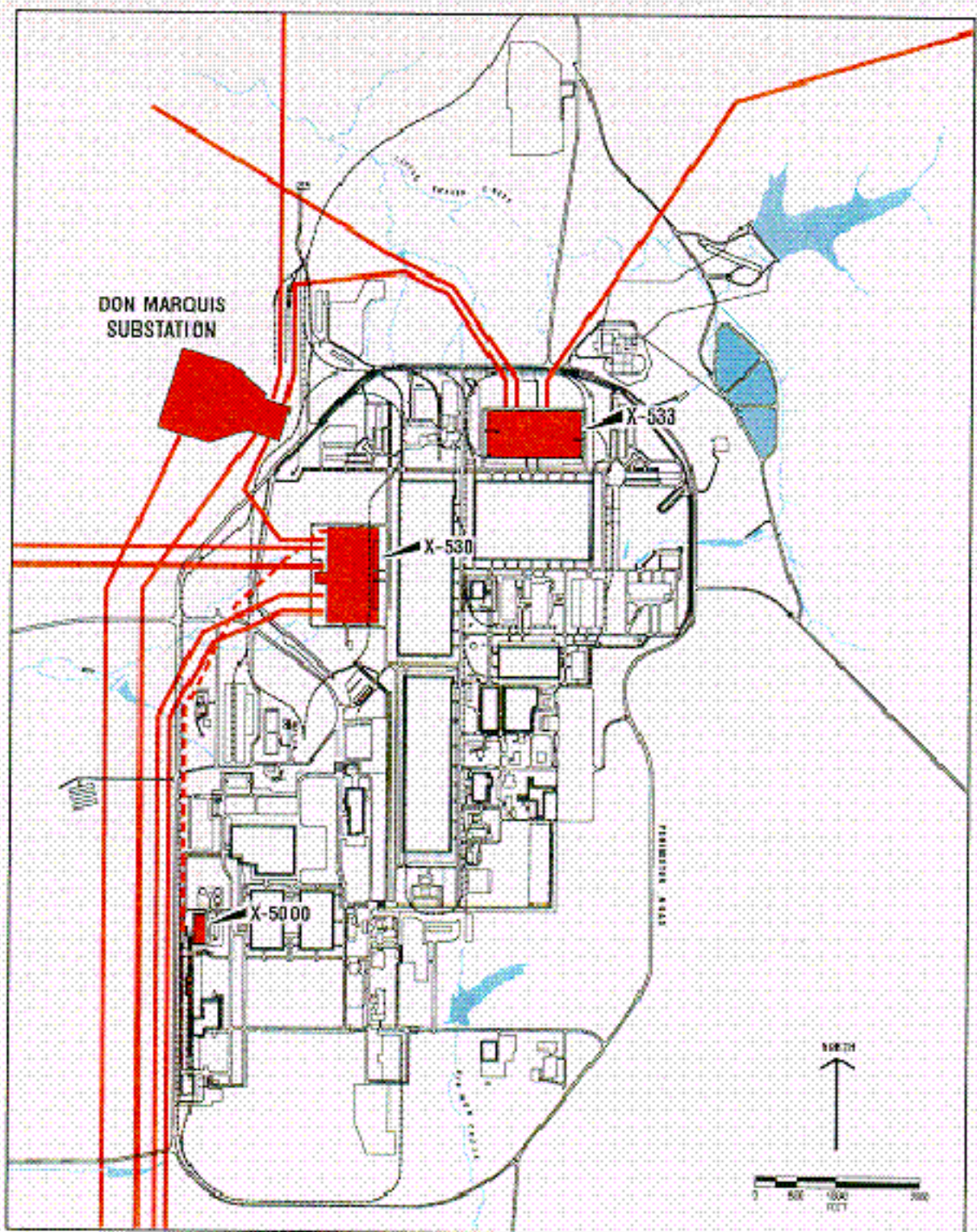


LEGEND

RAIL LINES

PARKING AREAS

PRIMARY ROADS



LEGEND

- HIGH-VOLTAGE POWER SUPPLY
- SUBSTATION AND SWITCHYARDS

Sanitary and Low-Pressure Fire Water System- The sanitary and low-pressure fire water system supplies potable water to most on-site buildings for drinking and water for use in restroom and shower facilities; for once-through cooling of air conditioning equipment, dryers, and heat exchange equipment at the air plants; and for water jacketed pumps. This system also supplies the fire sprinkler systems in the support buildings and switchyards, and all but four of PORTS fire hydrants. Figure 2.5-8 shows the sanitary and low-pressure fire water system.

Recirculating Cooling Water (RCW) System- The RCW system is used to remove excess heat from the diffusion process. The system consists of seven cooling towers, three pump houses (X-633, X-630, and X-626), and supply and return headers paralleling the process buildings. Figure 2.5-9 shows the location of the cooling towers and pump houses.

Recirculating Heating Water (RHW) System- The RHW system (see Figure 2.5-10) converts waste heat from the RCW system into heating for several major Process buildings throughout the plant. Most of the electric power consumed by the gaseous diffusion cascade is converted into heat by the compression necessary to the process.

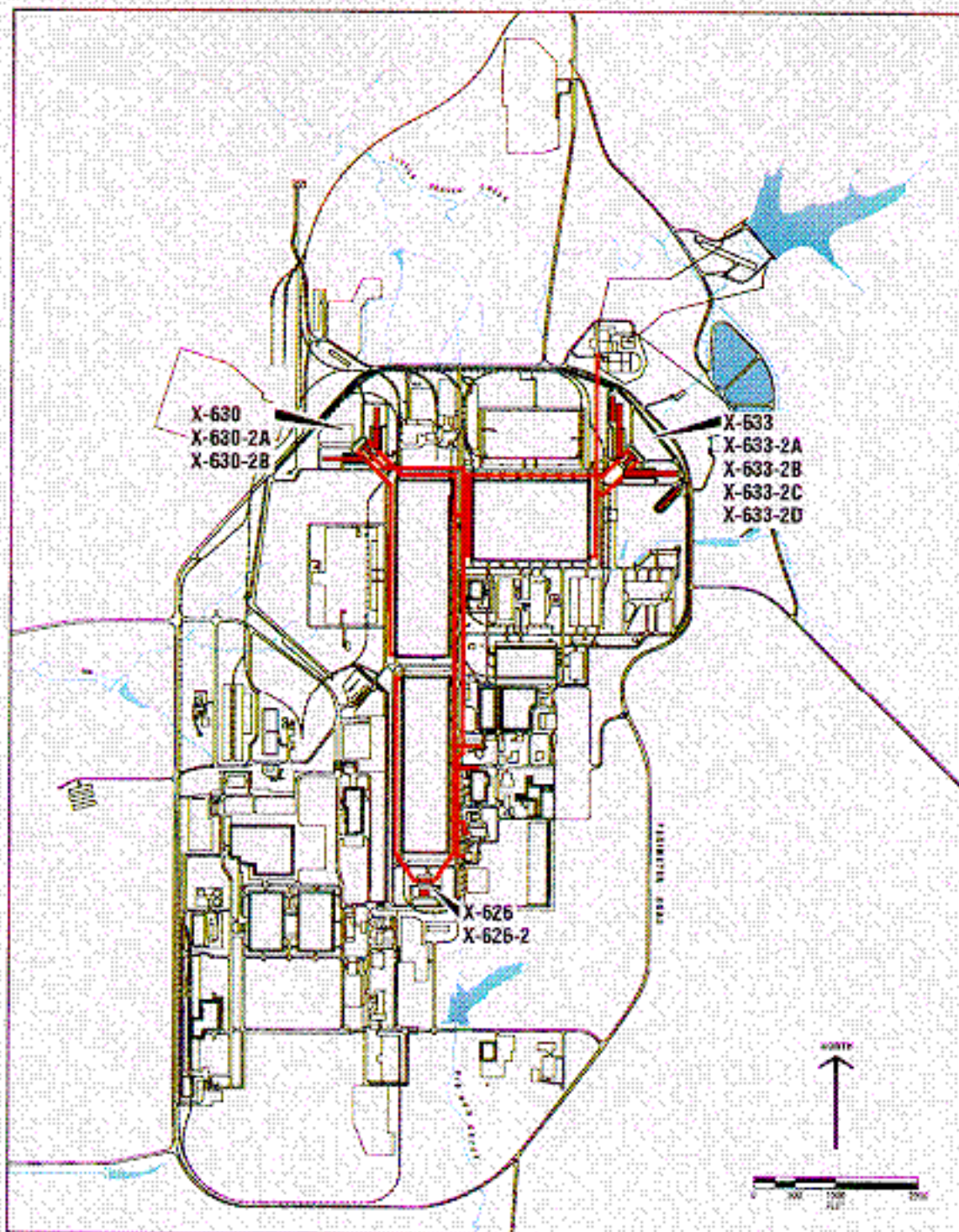
High-Pressure Fire Water System- A separate high-pressure fire water system is used for the five sprinkler systems within the three Process buildings and their respective cooling towers. Figure 2.5-11 shows the location of the high-pressure fire water system.

Sanitary Sewer System- The site's sanitary sewer system collects sewage waste by gravity feed from all main plant facilities. Because of the system's elevations, eight sewage lift stations are required to maintain wastewater flow to treatment facilities. Figure 2.5-12 shows the location of the sanitary sewage system.

Stormwater Management System- The mean annual rainfall for the PORTS area was 41.33 inches for the period from 1951 to 1980. Prior to original plant construction, this meant that the site served as the watershed for several wet-weather streams. The only stream which flows across the site is Little Beaver Creek. Flooding is not a problem for the complex. Standing water would present a problem on-site only in the event of a short-term, very heavy rain, and even then, would present no major problems. The X-608 well fields and pumphouse, located off-site, may occasionally expect flooding from the Scioto River, but these installations have been designed to avoid flood damage.

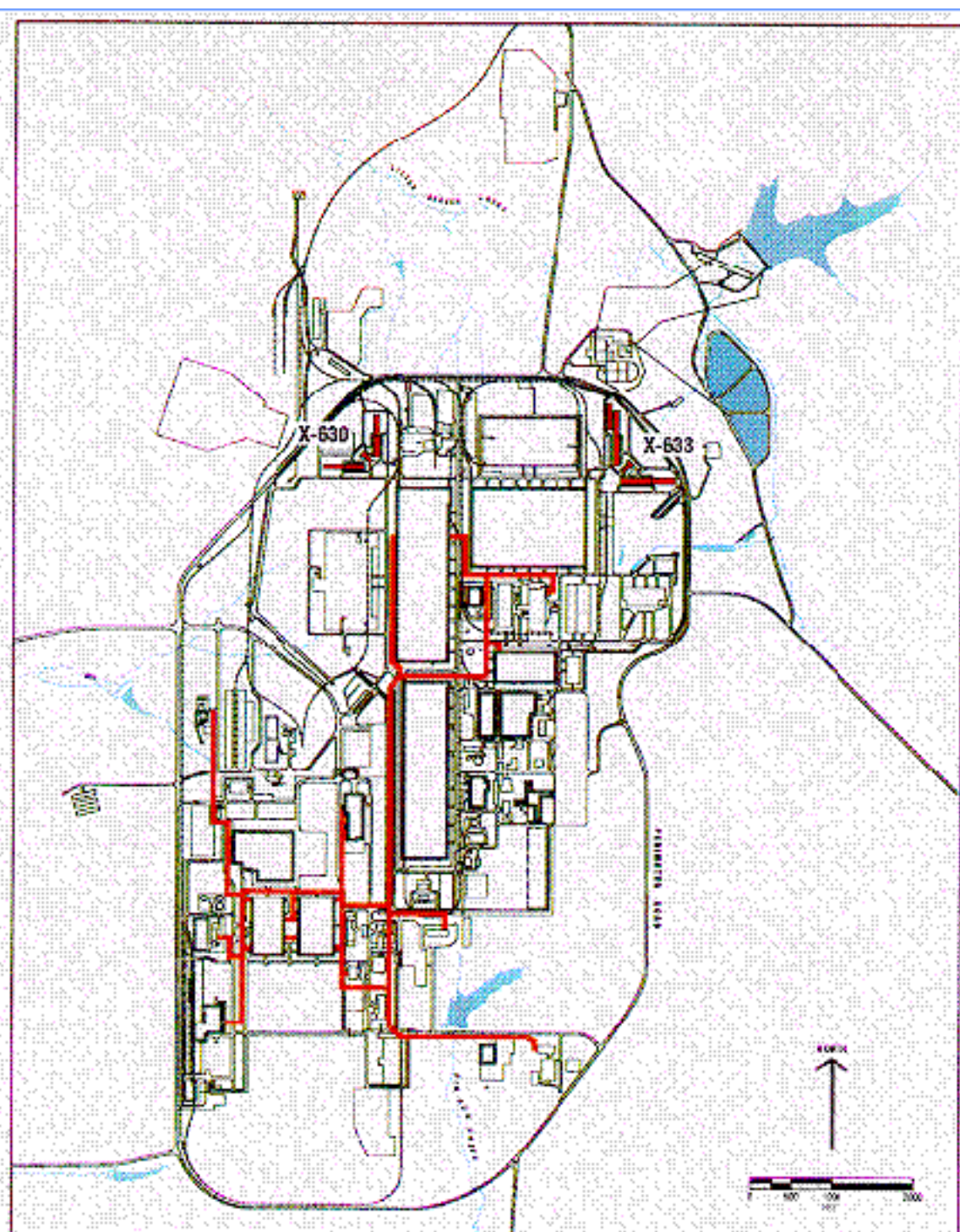
The site's storm drainage system is protected in some measure by seven holding basins (see Fig. 2.5-13). The south and north holding ponds (X-230K and X-230L) permit emergency impoundment of drainage waters in the event of a potentially damaging spill within PORTS. Two new holding ponds, X-2230M and X-2330N, which were constructed to control sediment run-off from previous construction, also provide emergency spill containment capability for operations in this area of the PORTS site. The primary purpose of three other basins (X-230-J5, X-230-J6, and X-230-J7) is oil removal. These basins do not have a direct flow impoundment capability, since they are kept full to permit proper functioning of oil removal equipment. They do, however, provide some buffer protection for dilution and treatment of a potentially hazardous spill.

Various plant wastewater from some facilities is discharged into the storm drain system and leaves the site as surface water. During dry periods, the flow into Little Beaver Creek and Big Run Creek may be entirely from plant discharges. In some cases, elaborate treatment systems have been installed to ensure that the discharges meet or exceed environmental guidelines for water quality. Such systems exist at the X-621 coal pile run-off treatment facility and the X-700 biodenitrification facility.



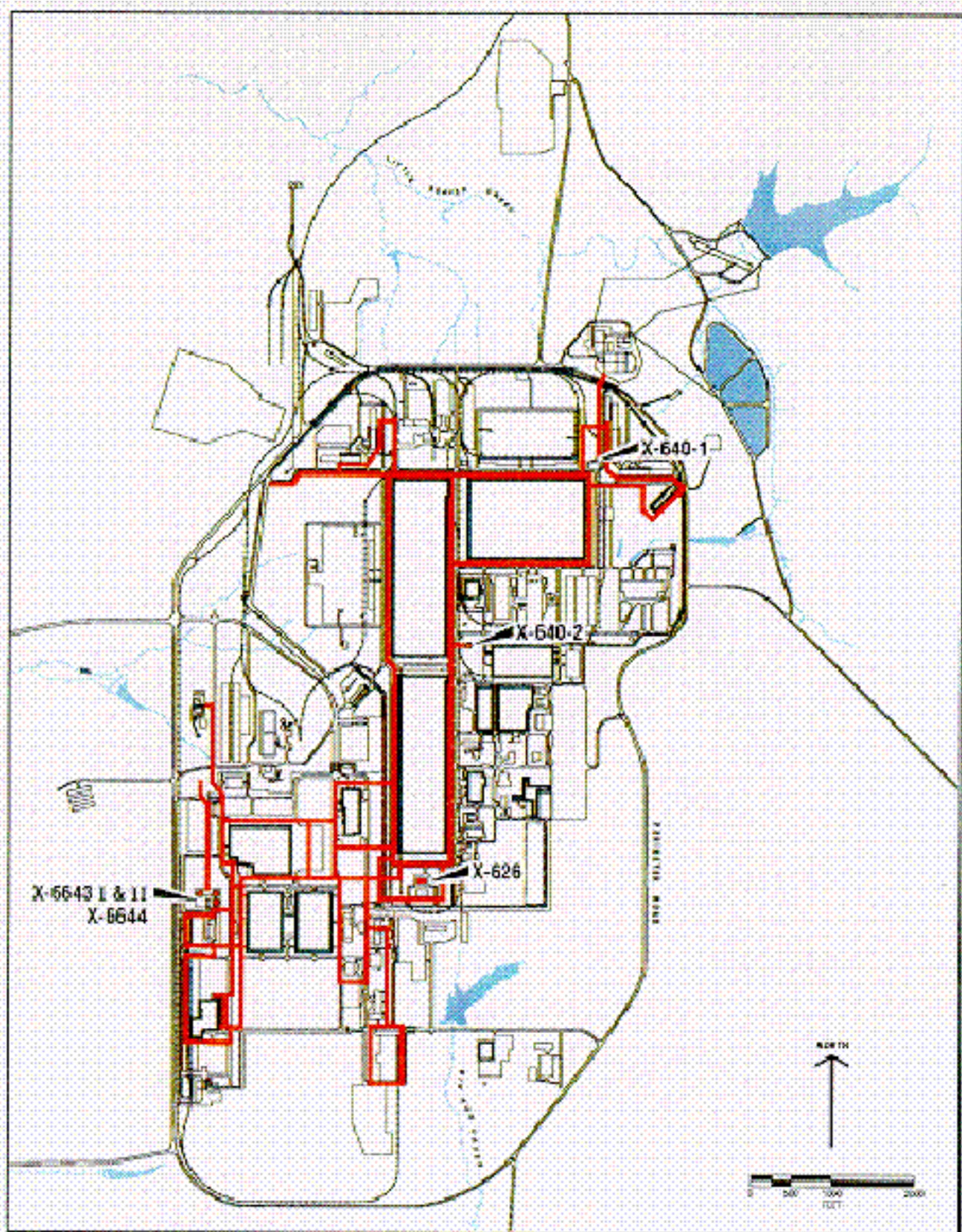
LEGEND

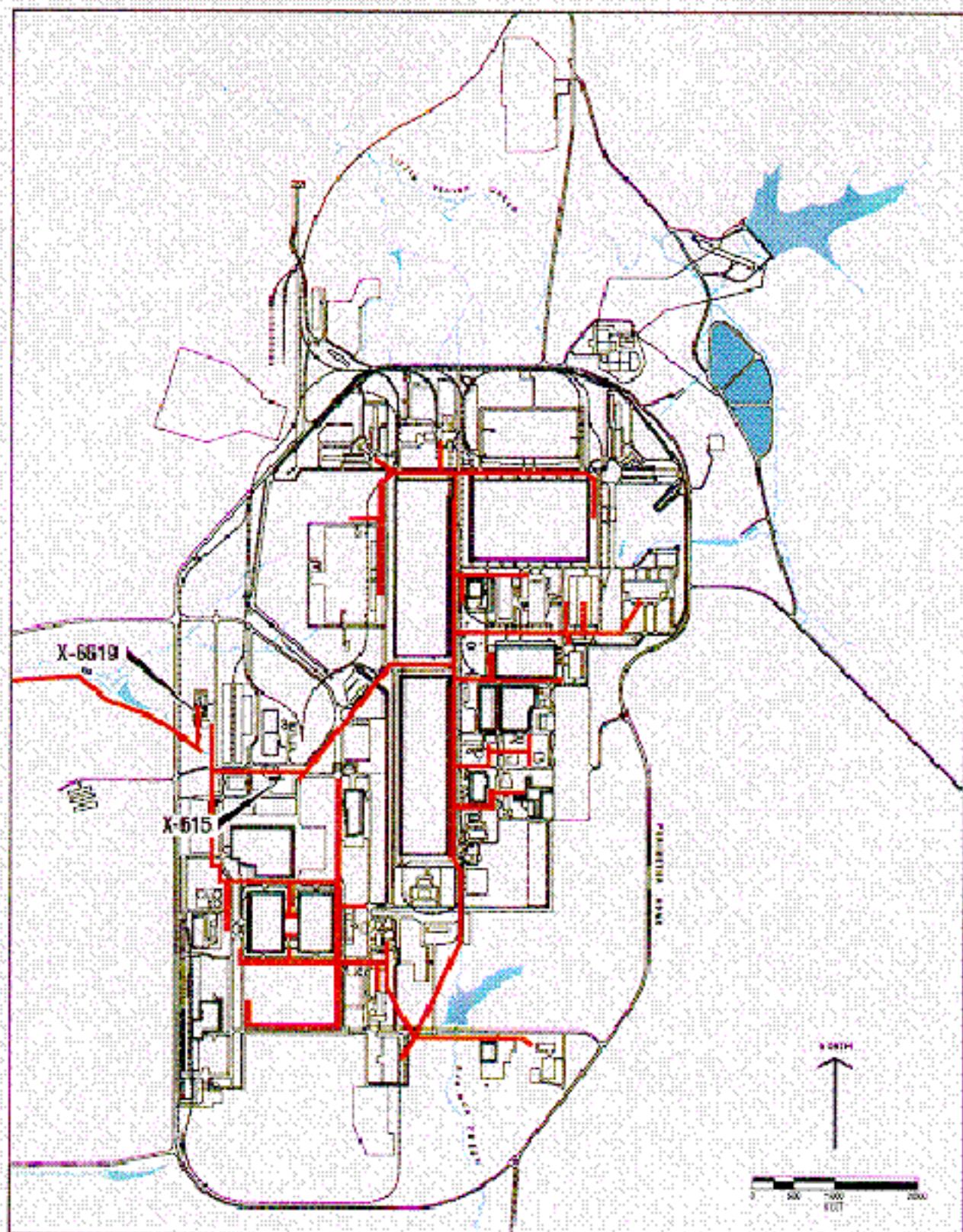
- RECIRCULATING COOLING WATER SYSTEM
- COOLING TOWERS AND PUMPHOUSES

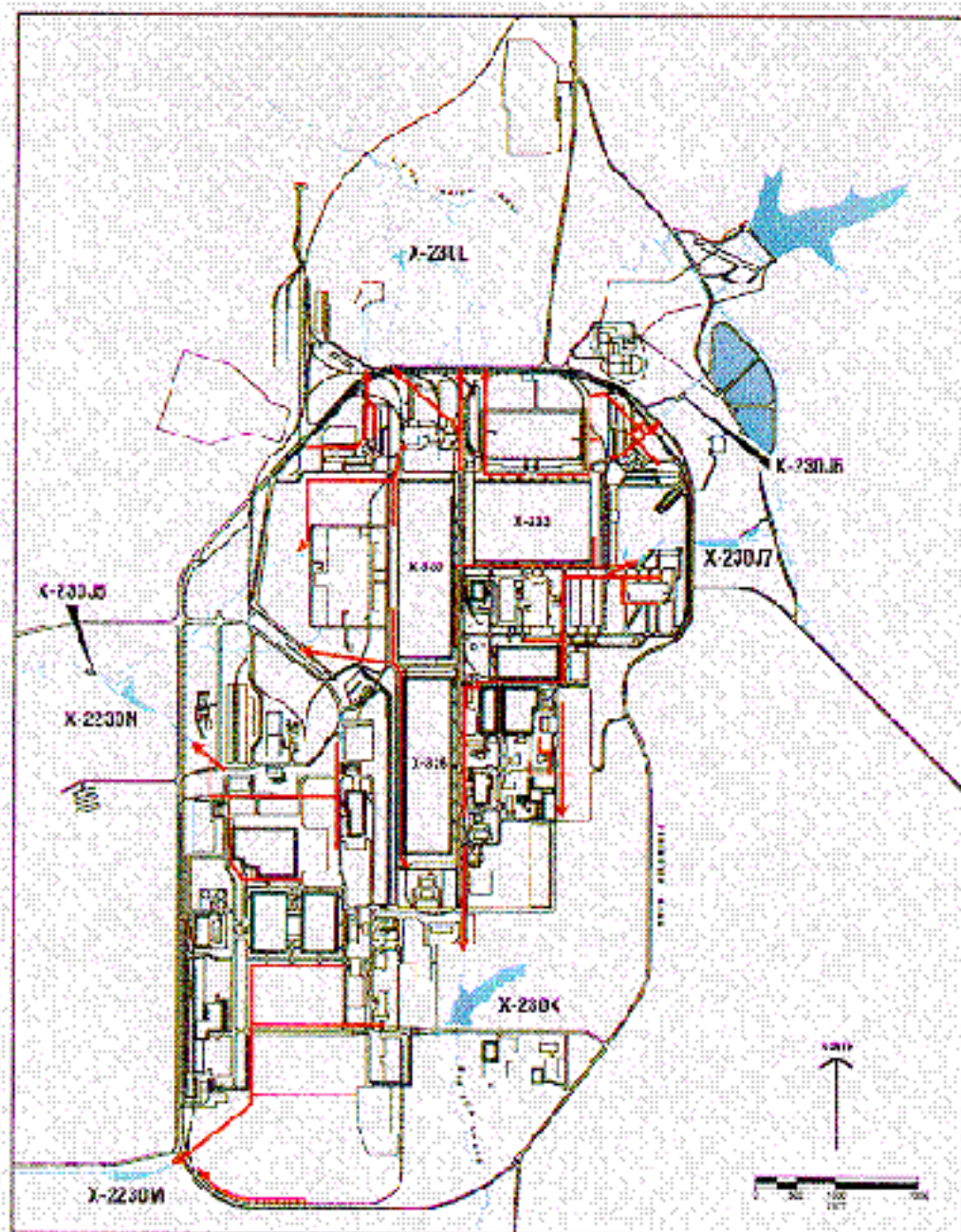


LEGEND

- RECIRCULATING HEATING WATER SYSTEM
- COOLING TOWERS AND PUMPHOUSES







LEGEND

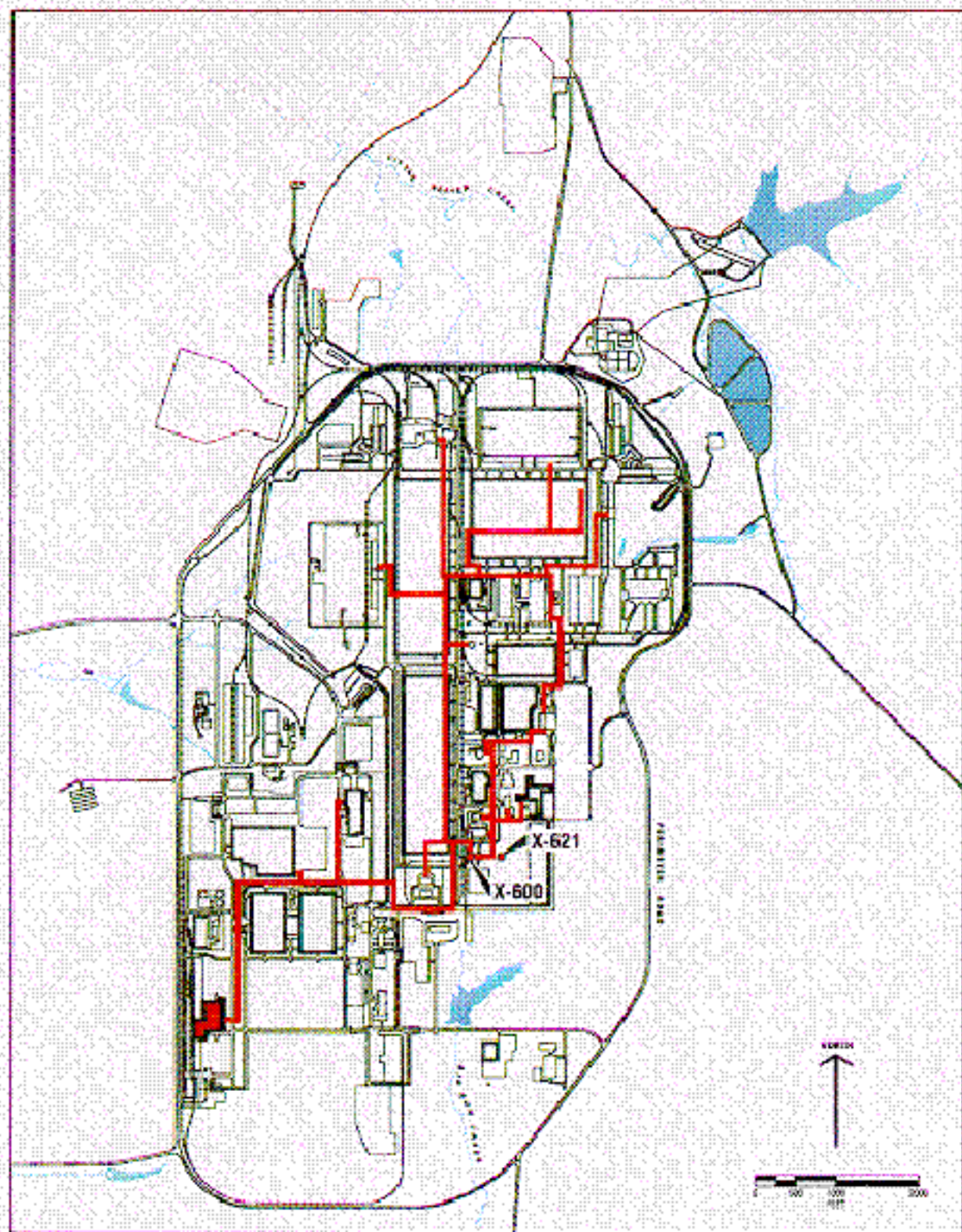
→ STORM DRAINAGE SYSTEM AND FLOW DIRECTION

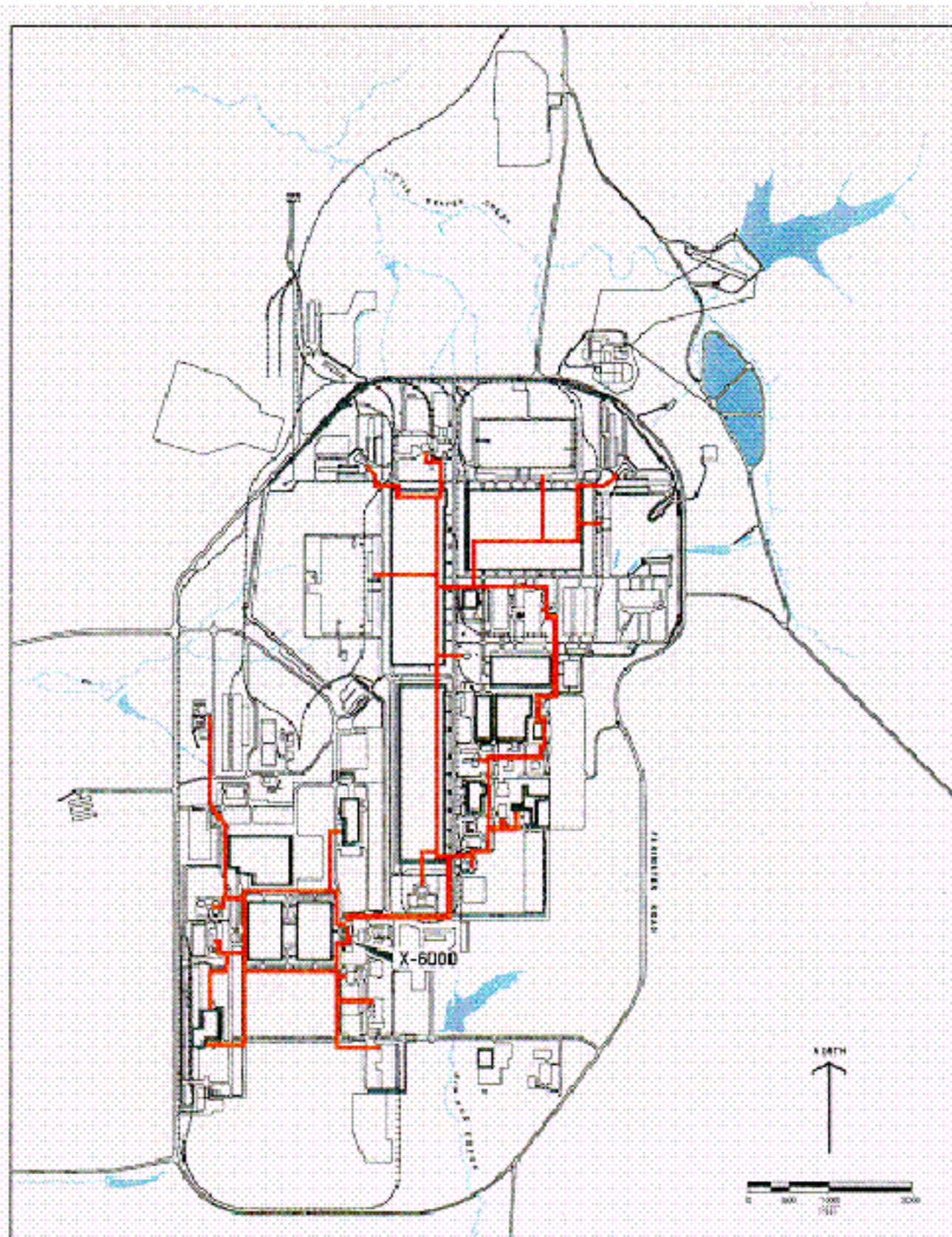
Steam Supply System- Steam is used throughout the year to vaporize UF_6 , obtain UF_6 samples from cylinders, maintain process temperatures, clean equipment, heat sanitary water, and provide heat for miscellaneous process and support operations. During the fall and winter months, steam is also used to heat major facilities. The steam system is in fair overall condition and should provide reliable and adequate service through the end of the century, with the ongoing upgrade project for X-600 (steam plant). Figure 2.5-14 shows the location of the steam supply system.

Steam is generated at the coal-fired X-600 steam plant by three boilers of the bent-tube design, each rated for continuous operation at 125,000 lb of steam per hour at 125 pounds per square inch. The plant contains the normal support equipment for boiler operations such as coal and ash handling equipment and boiler feed water treatment equipment. Boiler water is obtained from the sanitary water system. Adequate electrostatic precipitators have been installed on each boiler to meet EPA emissions criteria. These precipitators are to be replaced over the next few years as part of an upgrade project currently underway at the steam plant. Steam is distributed to most facilities by above-ground insulated pipes, with parallel piping providing return condensate.

Coal is stored in the adjacent X-600A coal pile yard. Run-off from the coal yard and wastewater effluents from the steam plant are treated for pH adjustment and heavy metal removal at X-621. Treated effluent then flows into the south holding pond. Sludge generated at X-621 is buried in the X-735 sanitary landfill, while ash is disposed of off-site.

Compressed Air System- The plant dry air system supplies a reliable source of dry, clean, oil-free compressed air for compressor seal operation, process equipment evacuation, vent gas ejection, pneumatic control operation, and miscellaneous laboratory and maintenance functions such as pneumatic tool operations. Figure 2.5-15 shows the location of the plant compressed air distribution system.





2.6 FUTURE USES FOR LAND, FACILITIES, AND EQUIPMENT

The future land use patterns at PORTS will remain basically the same as those now in existence. Table 2.6-1 demonstrates the future land use status through FY 2003 (expressed in acres). In addition, land users will continue to be sensitive to the identified requirements of PORTS. The following issues will have the most significant influence on future land use considerations:

- Additional office and training space for PORTS ER Program administrative and technical support;
- Locate waste storage facilities in appropriate areas;
- Provide laboratory capacity for DOE ES&H tasks;
- Make productive use of all PORTS facilities and land; and
- Community relations and stakeholder input for long-term future land use.

The last issue will affect the future use of PORTS land and facilities 25, 50, and 100 years into the future. Land use outside the perimeter road will not change except for several areas to the north that may be rededicated to waste management and production support. Within the perimeter road the greatest changes will be in increased storage capacities and treatment/processing facilities for waste management.

Figure 2.6-1 illustrates the locations of future facilities at proposed and conceptual levels. Projects such as waste management and environmental restoration facilities are funded, budgeted or proposed. Those projects identified as redeveloped parking areas, redesigned entry roads, and railroad improvements represent conceptual plans for future development. These facilities are not budgeted as projects; rather, they are shown as strategic vision indicators that meet future site mission needs. This conceptual view reveals the flexibility of PORTS to accommodate planned developmental changes.

Table 2.6-1 Future Uses for Land

	Private Lands		DOE Lands					
Fiscal Year	Total to be Addressed (acres)	Total Completed and Released	Total Owned by DOE (acres)	DOE Land to be Retained	Land that has been Released (2)	Remediate and Available for Release(4)	Land Not Ready to be Released	Leased(1) Property
Pre-95	0	0	3714	3714	0	0	N/A	1200
1995	0	0	3714	3714	0	0		1200
1996	0	0	3714	3714	0	0		1200
1997	0	0	3714	3714	0	0		1200
1998	0	0	3714	3714	0	0		1200
1999	0	0	3714	3714	0	0		1200
2000	0	0	3714	3714	0	0		(2)
2001	0	0	3714	3714	0	0		(2)
2002	0	0	3714	3714	0	0		(2)
2003	0	0	3714	3714	0	0		(2)

- Notes:
- (1) All leased acreage is approximate
 - (2) Property lease beyond 1999 uncertain. Tenants have first right of renewal or refusal.
 - (3) No released property has occurred or is planned within the indicated period.
 - (4) Current planning assumes all property retained for use of support of the gaseous diffusion process.

3.0

STATUS OF ENVIRONMENTAL RESTORATION ACTIVITIES

This section summarizes the status efforts to remediate release sites and contaminated buildings, including accomplishments, environmental condition of property, regulatory agreements and other legal drivers, waste management, and the history and status of other interrelated activities (public participation, program management, support programs, etc.).

3.1 CURRENT ENVIRONMENTAL RESTORATION ACTIVITIES

PORTS has been divided into quadrants as a management approach to facilitate the expedient cleanup of contaminated sites (see Figure 3.1-1). Each quadrant (see Figure 3.1-2) roughly corresponds to a distinct groundwater flow cell within the primary water-bearing unit beneath the site. Because the flow cells are the major pathways for contaminant migration, each has been investigated separately. The quadrants have been numbered in priority order with the greater potential risk to human health and the environment thought to emanate from Quadrant I. Within the quadrants are approximately 80 SWMUs which are undergoing remediation in accordance with both RCRA Closures and RCRA Corrective Actions.

The initial investigations for each potential release site, directed at identifying the contaminants, the extent of their migration, and their sources have been completed and initial corrective measures are underway.

Soon after environmental restoration started, five of the potential release sites were identified as requiring no further action. Since then, eight more sites (chromium sludge lagoons, a landfill for the disposal of contaminated materials, a landfill for the disposal of classified materials, an incinerator, chromium sludge monocells, a restricted waste storage facility, a waste oil tank, and a storage facility) have been certified for closure. Remedial actions have been completed at five other sites (an unrestricted waste storage facility, a chromic acid tank, a solid waste landfill, and an engineered cap over a landfill). Interim measures were implemented to contain contaminants, including construction of an in-ground slurry wall and a seep collection system.

There were 10 underground and aboveground storage tanks within the scope of the environmental restoration activity at Portsmouth. Three of these tanks were never placed into service and were removed. One other underground storage tank did not pass tightness tests and has been removed. Six abandoned aboveground storage tanks were also demolished. Surrounding soils were characterized and, where necessary, excavated and treated according to regulatory limits on petroleum contamination in soil.

Remedial actions are underway or being planned for seven other potential release sites, including two holding ponds, a radiological storage yard, a neutralization pit, a waste neutralization pit, a waste oil tank and facility, and an oil biodegradation plot.

Characterization activities at PORTS have been in progress for several years and RCRA Facility Investigations for each of the quadrants have been submitted to the regulatory agencies and are awaiting their approval. PORTS is contaminated with a variety of hazardous chemicals. The principal contaminate is trichloroethylene with lesser concentration of uranium, technetium, other VOCs/SVOCs, heavy metals, PCBs and PAHs.

Draft CAS/CMS Reports have been submitted for units in each of the four quadrants. Reports for three of the units, X-705A1B, X-611A, and Peter Kiewit Landfill have been approved.

Portsmouth Gaseous Diffusion Plant

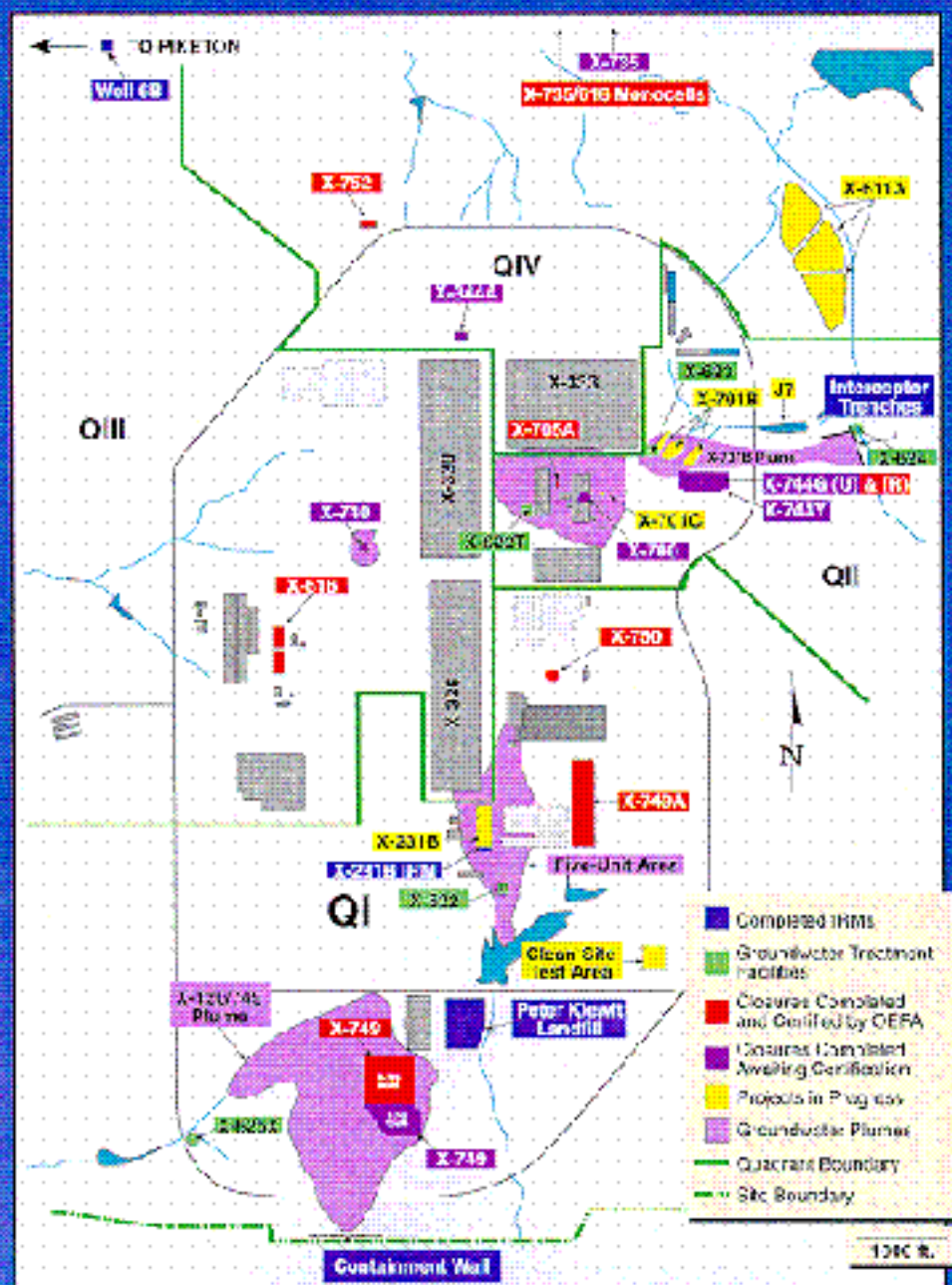


Table 3.1-1 summarizes the status of the PORTS Environmental Restoration Program and the principal contaminants of concern (COCs) associated with each SWMU. Items in the table which are completed or are in progress are shaded. The remediation activities are organized into five categories: (A) no further action required, (B) action taken to remediate and close, (C) action taken in conjunction with other SWMUs, (D) action deferred until shutdown and disposition, and (E) action initiated or planned. Table 3.1-2 identifies the DOE documents referenced in Table 3.1-1.

Figure 3.1-3 and 3.1-4 provide an environmental condition of property map for the site which is coded to indicate the concentration and location of volatile organic compounds. Figure 3.1-5 provides a location map of the significant trichloroethylene (TCE) groundwater plumes which have been identified during the course of the site investigations. Figures 3.1-6 through 3.1-11 provide the concentration of uranium and Technetium in soil, groundwater, and at various depths over the site.

3.2 REGULATORY AGREEMENTS, CONSENT DECREES, COMPLIANCE, AND OTHER LEGAL DRIVERS

On August 29, 1989, the State of Ohio and DOE finalized a Consent Decree under RCRA section 3008(h) filed with the U.S. District Court of Ohio, Eastern Division. On September 27, 1989, DOE executed an Administrative Order by Consent under authority of CERCLA section 106(a) and RCRA section 3008(h) with USEPA Region V. In 1994, the USEPA, Ohio EPA and DOE mutually amended the Administrative Order by Consent to be effective on August 11, 1994. The Consent Decree and Consent Order were negotiated to be consistent so that all work will satisfy RCRA and CERCLA requirements with both USEPA and Ohio EPA.

On February 20, 1996, the Uranium Enrichment Toxic Substances Control Act Federal Facilities Compliance Agreement (UE TSCA FFCA) was executed by DOE and the U.S. EPA. The UE TSCA FFCA identifies the requirements for achieving and maintaining TSCA polychlorinated biphenyl (PCB) compliance at the PORTS, PGDP, and Oak Ridge K-25 sites. Written clarifications by the U.S. EPA have been made on the implementation of the US TSCA FFCA on March 23, 1993, January 19, 1995, and October 12, 1995.

On May 17, 1993 a final Land Disposal Restricted (LDR) Ohio EPA Director's Findings and Orders (DF&O) was issued to the DOE exempting third/third hazardous and mixed wastes from being stored for a maximum one year until negotiations for long-term resolution could be concluded.

Section 105 of the Federal Facility Compliance Act of 1992 (FFCA), enacted October 6, 1992, required the Site Treatment Plan (STP) for all waste streams located at PORTS. On October 4, 1995, an Ohio EPA DF&O was issued to DOE for compliance with the FFCA. RCRA is the primary driver for ER activities at PORTS.

3.3 CURRENT WASTE MANAGEMENT AND MATERIAL DISPOSITION ACTIVITIES

The uranium enrichment process and associated support activities at PORTS result in the generation of low-level radioactive wastes (LLW), RCRA hazardous wastes, TSCA wastes, hazardous waste mixed with radionuclides, and industrial/sanitary wastes. No high-level radioactive wastes are generated or stored at the PORTS site.

All wastes generated must be managed in a manner which is protective of human health and the environment and in compliance with all applicable laws and regulations. Every organization at PORTS has responsibility for properly managing the waste it generates.

Table 3.1-1 PORTS Principal Contaminants of Concern

Description	Location	ADS #	Dates of Operation	COCs	Acres/Vol.	Regulatory Phase	Relative Risk	Category (*)	Cleanup Actions Completed
X-103 Auxiliary Office Building	Quadrant	I 6301	1954-Present (22)	None (1)		Draft Final RFI (1)	Low	A	None (1)
X-104A Indoor Firing Range	Quadrant	I 6301	~1980-Present (17)	None (1)		Draft Final RFI (1)	Low	A	None (1)
X-120 Old Training Facility	Quadrant	I 6301	1951-1955 (17)	Soil: Arsenic; Groundwater: See 120 Groundwater Plume (1) (9)	Soil = 400 cu. ft. (9)	Draft CMS for Soil, awaiting decision document (9)	Low	A	None (1)
X-230K South Holding Pond	Quadrant	I 6301	1956-Present (17)	Groundwater: See 5-Unit Area Groundwater Plume (9)	Soil = Not Available	Draft Final RFI for Soil (1); Groundwater (9)	Not Evaluated	D	
X-230K South Holding Pond Water Pile	Quadrant	I 6301	1980-Present (17)	Soil: Beryllium; Groundwater: Area Groundwater Plume (1)	Soil = Not Available; Groundwater = Not Available	Draft Final RFI for Soil (1); Groundwater (9)	Low	D	Sediments dredged 1980. Effluent adjusted for pH by addition of hydroxide (5)
X-231A Southeast Oil Biodegradation Plot	Quadrant	I 6301	1974-1976 (22); 1971-1976 (17)	Soil: Aroclor-1254, Aroclor-1260; Beryllium, Technetium, Uranium (1); Groundwater: See 5-Unit Area Groundwater Plume (9)	Soil = Not Available; Groundwater = Not Available	Draft Final RFI for Soil (1); Groundwater (9)	Low	A	Plot originally was treated with fertilizer and disced. Later was added, and finally, the cap was added.
X-231B Southwest Oil Biodegradation Plot	Quadrant	I 6301	1976-1987 (22); 1976-1983 (17)	Soil: None; Groundwater: See Draft 5-Unit Area (9)	Soil = Not Applicable (5); Groundwater = Not Available	Draft Final RFI for Soil (1); Groundwater (9)	Not Evaluated	C	RCRA Closure, soil mixing, extraction to remove volatile organics (19)
X-300 Plant Control Facility	Quadrant	I 6301	~1954-Present (22)	None (5)	Not Applicable (5)	DOCC, no further action required (5)	Not Evaluated		
X-600 Coal Fired Steam Plant Coal Storage Yard; X-621 Coal Runoff Treatment Facility	Quadrant	I 6301	1954-Present (22)	Soil: Arsenic; Groundwater: See 5-Unit Area Groundwater Plume (9); Surface Arsenic; Sediment: Arsenic, Beryllium (1)	Not Available	Draft Final RFI for Soil (1); Groundwater (9)	Medium	D	None (9)
X-626 Recirculating Cooling Pump House and Cooling Towers	Quadrant	I 6301	1955-Present (22)	Soil: Beryllium (1); Groundwater: Chloroform, 1,1-dichloroethene, Trichloroethene (1). Groundwater in Draft CMS for 5-Unit Area (9)	Soil = 400 cu. ft. (9)	Draft Final RFI for Soil (1); included in Draft Quadrant I Unit Area (9)	Low	D	None (5)
X-710 Technical Services Building/Neutralization Pit	Quadrant	I 6301	Building: 1953-Present (17); Pit: 1955-Present (22)	Groundwater: See 5-Unit Area Groundwater Plume (9)	Groundwater = See 5-Unit Area Groundwater Area Plume (9)	Draft CMS for Groundwater (9)	Not Evaluated	D	None (9)
X-741 Oil Drum Storage Facility	Quadrant	I 6301	1954-Present (22)	None (1)	Not Applicable	Draft Final RFI (1)	Low		None (1)
X-747F Miscellaneous Materials Yard	Quadrant	I 6301	~1955-Present (17)	Soil: Arsenic (1); Groundwater: Beryllium (1)	Soil = 7.3 acres; Groundwater = million gallons (9)	Draft Final RFI for Soil (1); Groundwater (9)	Low	D	None (9)
X-749 North Contaminated Materials Disposal Facility	Quadrant	I 6301	1955-1989 (22)				Not Evaluated		
X-749 South Contaminated Materials Disposal Facility	Quadrant	I 6301	1986-1988 (22)				Not Evaluated		
X-749 Contaminated Materials Facility/X-120 Groundwater Plume	Quadrant	I 6301	See Individual Units	Groundwater: Chloroform, 1,2-dichloroethene, 1,1-dichloroethene, 1,4-Dioxane, Tetrachloroethene, 1,1,1-Trichloroethene, 1,1,2-Trichloroethane, TCE (16)	Groundwater = Not Available	Draft Final RFI for Soil (1); Groundwater; RCRA closure for 749 (16)	High	E	IRM subsurface barrier installed 1995. Multimedia cap installed 749 during RCRA closure (1) (16)
X-749A Classified Materials Building	Quadrant	I 6301	1955-1990 (22)	Groundwater: See 5-Unit Area Groundwater Plume (9)	Groundwater = See 5-Unit Area Groundwater Plume (9)	Draft CMS for Groundwater (9)	Not Evaluated	B	Multimedia cap installed during closure activities in 1994
X-750 Fuel Station	Quadrant	I 6301	1953-Present (17)	None (5)	Not Applicable	DOCC (5), no further action required (5)	Not Evaluated		Four underground storage tanks removed and surrounding contaminated soil was excavated
X-751 Mobile Equipment Maintenance Shop	Quadrant	I 6301	1979-Present (22)	None (1)	Not Applicable	Draft Final RFI (1)	Not Evaluated	D	None (1)
X-760 Pilot Investigation Building	Quadrant	I 6301	1954-Present (17)	Groundwater: See 5-Unit Area Groundwater Plume (9)		Draft CMS for Groundwater (9)	Low	D	None (9)
X-1007 Fire Station	Quadrant	I 6301	1981-Present (17)	None (5)	Not Applicable (5)	DOCC, no further action (5)	Not Evaluated		
X-1020 Engineering Operations Center	Quadrant	I 6301	~1981-Present (17)	None (5)	Not Applicable (5)	DOCC, no further action (5)	Not Evaluated		
X-1107AV Interplant Portal (Vehicular)	Quadrant	I 6301	183-Present (17)	None (5)	Not Applicable (5)	DOCC, no further action (5)	Not Evaluated		
X-2230M Southwest Holding Pond	Quadrant	I 6301	1978-Present (22)	Soil: Arsenic; Sediment: PAHs, Arsenic (1)	Not Available	Draft Final RFI (1)	Medium	D	None (9)
X-3000 Central Control Building	Quadrant	I 6301	~1980-Present (17)	None (5)	Not Applicable (5)	DOCC, no further action required (5)	Not Evaluated		
X-3001 Process Building (GOC Inactive)	Quadrant	I 6301	Process Tests-19 (17)	None (5)	Not Applicable (5)	DOCC, no further action required (5)	Not Evaluated		
X-3002 Process Building (GOC Inactive)	Quadrant	I 6301	1991-Present (17)	None (5)	Not Applicable (5)	DOCC, no further action required (5)	Not Evaluated		
X-3346 Feed and Withdrawal Facility	Quadrant	I 6301	1991-Present (17)	None (5)	Not Applicable (5)	DOCC, no further action required (5)	Not Evaluated		
5-Unit Area Groundwater Plume	Quadrant	I 6301	See Individual Units	Groundwater: Antimony, Arsenic, Chromium, Thallium, Vanadium, Chlorine, Hydrocarbons, Benzene (1)	Groundwater = 22.3 million gallons (9)	Draft CMS (9) awaiting decision document (9)	High		None (9)
Big Run Creek	Quadrant	I 6301	Not Applicable	Surface Water: Arsenic; Sediment: PAHs (1)	Surface Water = Not Available	Draft Final RFI (1)	Medium		IMP relocated portion of the creek (28)
GCEP Underground Storage Tanks	Quadrant	I 6301	1984-Present (17)	None (1)	Not Applicable	Draft Final RFI (1)	Not Evaluated		None (1)
Peter Kiewit Landfill/X-847 Warehouse	Quadrant	I 6301	PK: 1952-1968; 847: ~1980-Present (22)	Soil: Arsenic, Aroclor-1260; Surface Water Seeps: Aroclor-1260; Vinyl Chloride; Groundwater: Antimony, Arsenic, Beryllium, Technetium, Uranium (1)	Soil (Landfill) = 130,000 cu. ft.; Surface Water Seeps = Not Available; Groundwater = Not Available	Draft Final CMS, awaiting decision document (14)	Medium	E	IMP relocated portion of Big Run Creek. Seep collection system installed (28)
Quadrant I Sanitary Sewer System	Quadrant	I 6301	~1954-Present (17)	COCs at SASW sampling locations included with the nearest SWMU	Not Applicable	Draft Final RFI (1)	Not Evaluated		None (1)
Quadrant I Storm Sewer System	Quadrant	I 6301	1951-Present (22)	Groundwater: Arsenic in well S (1); COCs at other STSW sampling locations were included with the nearest SWMU	Groundwater = Not Available	Draft Final RFI (1)	Low		None (1)
X-100L Environmental Control Building	Quadrant	I 6302	1980-Present (6)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-101A Credit Union Trailer	Quadrant	I 6302	1977-Present (6)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-105 Electronic Maintenance Building	Quadrant	I 6302	1957-Present (17)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-109B Personnel Monitoring Building	Quadrant	I 6302	1955-Present (17)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-116 Storage Trailer	Quadrant	I 6302	Not Available	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-230J1 East Environmental Services Building	Quadrant	I 6302	1968-Present (17)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-230J7 East Holding Pond at Separation Basin	Quadrant	I 6302	1981-Present (22)	Sediment: PAHs, Arsenic (2)	4 acres (6)	Draft CMS, awaiting decision document (10)	Not Evaluated	D	None (10)
X-343 Feed Vaporization and Facility	Quadrant	I 6302	1981-Present (22)	Soil: PAHs (2)	Not Available	Draft CMS, awaiting decision document (10)	Not Evaluated	D	None (10)
X-345 Special Nuclear Materials Building	Quadrant	I 6302	1980-Present (6)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-633 Recirculating Water Pumps and Cooling Towers	Quadrant	I 6302	1955-Present (22)	Groundwater: Chromium, Antimony, Arsenic, Cadmium, Mercury, Nickel, Zinc, Beryllium, 1,1-Trichloroethene (1)	Groundwater = 1.7 million gallons (10)	Draft CMS (10) awaiting decision document (10)	Medium	D	None (10)
X-640-2 Elevated Water Tank	Quadrant	I 6302	1960-Present (17)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-700 Chemical Cleaning Facility	Quadrant	I 6302	1955-Present (22)	Soil: PCBs, PAHs; Uranium; Groundwater: See 7-Unit Investigative Area (2)	Soil = Not Available; Groundwater = Not Available	Draft CMS, awaiting decision document (10)	Low	D	No cleanup of soil or groundwater. See X-700 Tanks 6, 7, 8 for RCRA closure information
X-700 Tank No. 6	Quadrant	I 6302		None	Not Applicable	Closure Certification Pending	Not Evaluated		RCRA Closure (20). Certification pending ()
X-700 Tank No. 7	Quadrant	I 6302		None	Not Applicable	Closure Certification	Not Evaluated		RCRA Closure (10).
X-700 Tank No. 8	Quadrant	I 6302		None	Not Applicable	Closure Certification Pending	Not Evaluated		RCRA Closure (21). Certification pending ()
X-700 CT Chemical and Petroleum Storage Containment Tanks	Quadrant	I 6302	1979-Present (6)	Soil: PCBs, PAHs; Uranium (2); Groundwater: See 7-Unit Area Groundwater Plume (9)	Not Available (10)	Draft Final RFI (2)	Low		None (10)
X-700A Air Conditioning Equipment Building	Quadrant	I 6302	1975-Present (17)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-700T TCE/TCA Outside Storage Tank	Quadrant	I 6302	1955-Present (17)	Soil: PCBs, PAHs; Uranium (2); Groundwater: See 7-Unit Area Groundwater Plume (9)	Not Available (10)	Draft Final RFI (2)	Low		None (10)

Note: Shading Denotes Items that are Either Completed or In-Progress (and match those included on the Facilities Data Call).

Table 3.1-1 PORTS Principal Contaminants of Concern

Description	Location	ADS #	Dates of Operation	COCs	Acres/Vol.	Regulatory Phase	Relative Risk	Category (*)	Cleanup Actions Completed
X-701 BP Northeast Oil Biodegradation Plot	Quadrant	IE302	1973-1974 (22)	None (2)	Not Applicable	RFI (2)	Low		None (10)
X-701A Lime House	Quadrant	IE302	1955-Present (17)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-701B East and West Retention Ponds	Quadrant	IE302	E: 1974-1980; W: 1980-1985 (22)	None (10)	Not Applicable	Draft Final RFI (2)	Not Evaluated	E	RCRA closure: 1) removal of and one ft. soil, 2) backfill temporary cap (10)
X-701B Holding Pond	Quadrant	IE302	1954-1988 (22)	Groundwater: VOCs, TCE (10)	Not Available (10)	Draft CMS (10), RCRA Closure awaiting decision document	Low	E	RCRA closure remedial action: removal of sludge and one ft. new drainage system, 3) pro lines sealed. Interim Remed implemented to interrupt TCE groundwater plume prior to Little Beaver Creek and the East Drainage Ditch. groundwater extraction well been installed for pump and applications (10)
X-701C Neutralization Pit	Quadrant	IE302	1953-1988 (22)	Groundwater: See 7-Unit Area (2)	Groundwater: See 7-Unit Investigative Area (2)	Draft CMS, awaiting decision document (10)	Low	E	None (10)
X-701D Water De-ionization Facility	Quadrant	IE302	1955-Present (17)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-701E Neutralization Building	Quadrant	IE302	1973-Present (17)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-701F Effluent Monitoring Building	Quadrant	IE302	1981-1989 (6)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-705 Decontamination Building	Quadrant	IE302	1955-Present (22)	Soil: PAHs, Uranium; Groundwater: Uranium (2)	Soil = Not Available; Groundwater = Not Available; Groundwater: 7-Unit Investigative Area (2)	Draft CMS, awaiting decision document (10)	Low	D	Soil and gravel contaminated with Uranium and Technetium removed from storage area west of building (1980). Concrete pad installed (10)
X-705A Radioactive Waste Incinerator/X-705B Contaminated Burnables Storage Lot	Quadrant	IE302	Incinerator: 1973-1986 (22); Storage Lot: 1957-Present (22)	Soil: Uranium (13)	Soil = 1872 cu. yd. (13)	Draft CMS Approved, awaiting decision document (13)	Medium	E	Partial RCRA Closure 11/89 (10)
X-705D Heating Booster Pump Building	Quadrant	IE302	1983-Present (17)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-720 Maintenance Building	Quadrant	IE302	1954-Present (22)	Soils: Arsenic, TCE; Groundwater: Uranium (2)	Soil = 400 cu. ft., Groundwater: 7-Unit Investigative Area (2)	Draft CMS, awaiting decision document (10)	Low	D	None (10)
X-720 Neutralization Pit	Quadrant	IE302	1954-1991 (17)	Sediments: Mercury, Arsenic, Uranium; Groundwater: See 7-Unit Investigative Area (2)	Sediment = Not Available; Groundwater: 7-Unit Investigative Area (2)	Removal Action (10)	Not Evaluated		None (10)
X-720A Maintenance Building	Quadrant	IE302	1954-Present (17)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated	D	None (6)
X-720B Radio Base Station Building	Quadrant	IE302	1978-Present (17)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-720C Paint and Oil Storage Building	Quadrant	IE302	1980-Present (22)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-744 Retrievable Waste Storage Building	Quadrant	IE302	1955-Present (22)	Soil: Technetium (2)	Not Available	Draft Final RFI (10)	Low		None (2)
X-744G Bulk Storage Building	Quadrant	IE302	1956-Present (22)	Soil: PAHs, Uranium; Groundwater: Antimony, Arsenic, Cadmium, Chromium, Nickel, Vanadium, Beryllium, Thallium, Vanadium, Beryllium, Technetium (10)	Soil = Not Available; Groundwater: 12 million gallons (10)	Draft CMS, awaiting decision document (10)	High	B	Building decontamination under RCRA closure completed; X-744(R) closed by OEPA; X-744(U) certification pending (10)
X-744H Bulk Storage Building	Quadrant	IE302	1953-Present (22)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-744J Bulk Storage Building	Quadrant	IE302	1953-Present (22)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-744L Store and Maintenance Warehouse	Quadrant	IE302	1983-Present (22)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-744Y Mixed Waste Storage Yard	Quadrant	IE302	1955-Present (22)	Soil: PAHs, Uranium; Groundwater: Antimony, Arsenic, Cadmium, Chromium, Nickel, Vanadium, Beryllium, Thallium, Vanadium, Beryllium, Technetium (10)	Not Available	Draft CMS (included with X-744 awaiting decision document (10) plan for X-744Y (24)	Not Evaluated	C	Sorting activity for storage under RCRA closure complete (10)
X-747A, B, C, D, and E Material Storage Yards	Quadrant	IE302	1976-Present (6)	None (6)	Not Applicable (6)	DOCC (6)	Not Evaluated		None (6)
X-747G Northeast Contaminated Material Storage Yard	Quadrant	IE302	1976-Present (22)	None (2)	Not Applicable	Draft Final RFI (2)	Low	D	None (2)
7-Unit Investigative Area	Quadrant	IE302	See Individual Units	Groundwater: Antimony, Arsenic, Chromium, Nickel, Vanadium, TCE, dichloroethene, Acrylonitrile, Beryllium, Technetium (10)	Groundwater = 12 million gallons (10)	Draft CMS (10), awaiting decision document	High		X-700 Chromic Acid Tank #7 (10)
Barren Area	Quadrant	IE302	1970s (6)	Soil: Arsenic (2)	Not Available	Draft Final RFI (2)	Low		None (10)
East Drainage Ditch	Quadrant	IE302	1951-Present (22)	Soil: Aroclor-1260, Arsenic, Uranium; Sediment: Aroclor-1260, Arsenic, Beryllium (2)	Not Available	Draft CMS, awaiting decision document (10)	Medium	E	1400 cu. yd. PCB contaminant removed 1986. (6)
Little Beaver Creek	Quadrant	IE302	1954-Present (6)	Soil: Aroclor-1260, PAHs, Uranium; Sediment: Aroclor-1260, PAHs, Uranium (2)	Not Available	Draft Final RFI (2)	Medium	A	None (6)
Process Waste Lines (X-700, X-705, X-720)	Quadrant	IE302	1955-1988 (22)	Groundwater: See 7-Unit Investigative Area (2)	Not Applicable	Draft Final RFI (2)	Low		None (10)
Sanitary Sewer System and X-Northeast Sewage Lift Station	Quadrant	IE302	SSS: 1950s-Present (17); X-614P: 1951-Present (17)	Soil: None (2)	Not Applicable	Draft Final RFI (2)	Not Evaluated		None (10)
Storm Sewer System (D & E)	Quadrant	IE302	1951-Present (22)	None (2)	Not Applicable	Draft CMS, awaiting decision document (10)	Not Evaluated		None (10)
X-108E C-Portal	Quadrant	IEB03	1975-Present (17)	None (7)	Not Applicable	DOCC, no further action required (10)	Not Evaluated		None (7)
X-109A Personnel Monitoring Building/Waste Oil Reclamation Building	Quadrant	IEB03	X-109A: 1995-Present (17); X-109B: 1982-1991 (17)	None (7)	Not Applicable	DOCC, no further action required (10)	Not Evaluated		None (7)
X-111A Monitoring Portal and X-111B Portal Northwest	Quadrant	IEB03	1981-Present (17)	None (7)	Not Applicable	DOCC, no further action required (10)	Not Evaluated		None (7)
X-230J3 West Environmental Separation Building and Intermittent Collection Basin	Quadrant SWMU Group 4	6303	1968-Present (17)	Soil: Benzo(a)anthracene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3,-cd)pyrene, Aroclor-1260, Uranium (11)	Soil: 28,150 cu. yd. (11)	Draft CMS (11)	Medium	D	None (11)
X-230J5 West Holding Pond and Separation Basin	Quadrant SWMU Group 4	6303	1981-Present (7)	Soil: Benzo(a)anthracene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3,-cd)pyrene, Aroclor-1260, Uranium (11)	Soil: 1,500 cu. yd. (11)	Draft CMS (11)	Medium	D	None (11)
X-326 Process Building	Quadrant SWMU Group 1	6303	1956-Present (22)	Groundwater: Arsenic (3)	Not Available	Draft CMS (11)	Medium	D	None (3)
X-330 Process Building	Quadrant SWMU Group 1	6303	1955-Present (17)	Groundwater - Arsenic (3)	Not Available	Draft CMS (11)	Not Evaluated	D	None (3)
X-530 A-G Switchyard and Associated Buildings	Quadrant SWMU Group 2	6303	A-F: 1954-Present (17); G: 1980-Present (17)	Soil: Benzo(a)anthracene, Benzo(b)fluoranthene, Aroclor-1260, Uranium (11)	Soil: 30 cu. yd. (11); Groundwater: Not Available	Draft CMS (11)	Medium	D	None (3)
X-612 Elevated Water Tank	Quadrant	IEB03	1954-Present (17)	None (7)	Not Applicable	DOCC (7)	Not Evaluated		None (7)
X-615 Abandoned Sanitary Sewer Treatment Facility	Quadrant SWMU Group 3	6303	1955-1982 (22)	Soil: Aroclor-1260, Beryllium (11)	Soil: 1270 cu. yd. (11)	Draft CMS	Medium	E	Soils underlying the digest drying bed materials were removed, containerized, and stored in X-333 Process Building. construction of a facility for handling this type of mixed waste (1,210,000 lb) (11)

Note: Shading Denotes Items that are Either Completed or In-Progress (and match those included on the Facilities Data Call).

Table 3.1-1 PORTS Principal Contaminants of Concern

Description	Location	ADS #	Dates of Operation	COCs	Acres/Vol.	Regulatory Phase	Relative Risk	Category (*)	Cleanup Actions Completed
X-616 Effluent Control Facility Chromium Sludge Lagoons	Quadrant SWMU Group 3	6303	1976-1989 (22)	Groundwater: 1,1-Dichloroethene (3)	Not Available	Draft CMS (11)	Low	B	Per RCRA enforcement action, sludge lagoons closed and removed, treated, and disposed in Sanitary Landfill; contaminated underlying soils excavated, disposed in X-735 monocoiled lagoon area was then backfilled (11)
X-740 Waste Oil Handling Facility	Quadrant SWMU Group 2	6303	1982-1991 (22)	Soil: Arsenic (11); Groundwater: Trichloroethene, Tetrachloroethene, Dichloroethene, Arsenic (3)	Not Available	Draft CMS (11)	Medium	E	The tank/sump and some associated contaminated soil was removed as a RCRA closure (11)
X-744N, X-744P, X-744Q Warehouse, and Associated Oil Construction Headquarters Area	Quadrant	6303	N, P, Q: 1983-Present (22); HQ: 1950s	Soil: Arsenic, Benzo(a)pyrene (11)	Soil: 200 cu. yd. (11)	Draft CMS (11)	Medium	D	None (11)
X-744S, X-744T, X-744U Warehouses	Quadrant SWMU Group 3	6303	1978-Present (22)	Shallow Soil: Aroclor-1260, Benzo(a)pyrene, Lithium, Zinc (4)	240 cu. yd. (11)	Draft CMS (11)	Low	A	Lithium hydroxide repackaged into cardboard containers damaged by precipitation into 75-gallon drums and warehouses repaired to prevent precipitation leakage (11)
X-745C West Cylinder Storage Area	Quadrant SWMU Group 2	6303	1956-Present (17)	Shallow Soil: Aroclor-1254, Arsenic, Beryllium, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Chrysene, Benzo(a,h)anthracene (11)	30 cu. yd. (11)	Draft CMS (11)	Medium		None reported (11)
X-748 Truck Scales	Quadrant	6303	Unknown (17)	None (7)	Not Applicable	DOCC (7)	Not Evaluated		None (7)
X-1107 DP, DV, EP, EV North Northwest Pedestrian and Vehicle	Quadrant	6303	1985-Present (17)	None (7)	Not Applicable	DOCC (7)	Not Evaluated		None (7)
X-2207D Parking Lot/Cylinder Yard A	Quadrant	6303	PL: 1982-Present (17); A: 2-1978 (7)	None (7)	Not Applicable	DOCC (7)	Not Evaluated		None (7)
X-2230N West Holding Pond	Quadrant SWMU Group 4	6303	1978-Present (22)	Sediment: Aroclor-1260, Arsenic, Manganese (11)	Not Available (11)	Draft CMS (11)	Medium	D	None (11)
X-6619 Sewage Treatment Facility	Quadrant SWMU Group 3	6303	1980-Present (22)	Soil: Arsenic (11); Groundwater: Arsenic (4)	Not Available	Draft CMS (11)	Medium	D	None (11)
X-7725 Recycle Assembly Building, Recycle Assembly Storage and Initial Construction Building Storage Area (BFS)	Quadrant	6303	7725, 7725R: 1950s (22); BFS: 1950s (22)	Soil: Arsenic, Beryllium (11)	Soil: 86 cu. yd. (11)	Draft CMS (11)	Medium		None (11)
X-7725A Waste Accountability (GCEP) and X-7727H Transfer Corridor (GCEP)	Quadrant	6303	1983-Present (17)	None (7)	Not Applicable	DOCC (7)	Not Evaluated		None (7)
X-7726 Centrifuge Training Facility	Quadrant	6303	1983-Present (17)	None (7)	Not Applicable	DOCC (7)	Not Evaluated		None (7)
Don Marquis, Substation, Associated Containment Ponds, Drainage and Construction Spoils	Quadrant	6303	SS, CPs, DDs: 1950s (22); CS: Available	Sediment: Arsenic (11)	Sediment: 52 cu. yd (11)	Draft CMS (11)	High	D	None (11) (17)
OVEC Storage Area and Microwave Tower	Quadrant	6303	SA: 1966-Present (17); MT: 1976-Present (17)	None (7)	Not Applicable	DOCC (7)	Not Evaluated		None (7)
RCW System and Blowdown Line	Quadrant	6303	See Individual Units	None (3)	Not Applicable	Draft Final RFI (3)	Not Evaluated		None (3)
Sanitary Sewer System	Quadrant	6303	1950-Present (17)	None (3)	Not Applicable	Draft Final RFI (3)	Not Evaluated		None (3)
Storm Sewers A, B, and J	Quadrant	6303	1951-Present (22)	Sample results included with new storm sewer system (11)	Not Applicable	Draft CMS (11)	Not Evaluated		None Reported (11) (17)
West Drainage Ditch	Quadrant SWMU Group 4	6303	1951-Present (7)	Soil: None; Sediment: PAHs (Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene), Aroclor-1260, Manganese (11)	Solid Waste = 30,480 cu. yd. Waste = 5520 cu. yd.; some sediments is marked unknown	Draft CMS (11)	Medium	E	None (11) (17)
X-108H Pike Avenue Portal	Quadrant	6304	1976-Present (17)	None (8)	Not Applicable (8)	DOCC, no further action required (8)	Not Evaluated		None (8)
X-114A Firing Range	Quadrant	6304	1979-1990 (22)	Surface Water: Beryllium (4)	Not Applicable	Draft Final RFI (4)	High		None (4)
X-206H Parking Lot	Quadrant	6304	1973-Present (8)	None (8)	Not Applicable (8)	DOCC, no further action required (8)	Not Evaluated		None (8)
X-230J6 Northeast Holding Pond	Quadrant SWMU Group 5	6304	1983-Present (22)	Sediments: PAHs, Aroclor-1260, Beryllium; Groundwater: Arsenic (4)	100 cu. yd. (12)	Draft CMS, awaiting decision document (12)	Medium	D	None (12)
X-230J9 North Environmental Sampling Building	Quadrant	6304	1981-Present (17)	None (8)	Not Applicable (8)	DOCC, no further action required (8)	Not Evaluated		None (8)
X-230L North Holding Pond	Quadrant SWMU Group 5	6304	1981-Present (17)	None (12)	Not Applicable (12)	Draft CMS, awaiting decision document (12)	Not Evaluated		None (12)
X-333 Process Building	Quadrant SWMU Group 1	6304	1955-Present (17)	Soil: Arsenic, Aroclor-1260, PAHs; Groundwater: Arsenic, VOCs (4)	Soil = 65 cu. yd. (12)	Draft CMS, awaiting decision document (12)	Medium	D	None (12)
X-334 Transformer Storage and Cleaning Building	Quadrant SWMU Group 1	6304	1985-Present (22)	None (12)	None (12)	Draft CMS, awaiting decision document (12)	Low	A	None (12)
X-342A Feed Vaporization and Fluorine Generation Building	Quadrant SWMU Group 2	6304	A,B: 1954-Present (22); C: 1955-Present (17)	Groundwater: Arsenic; Sediments: Benzo(a)pyrene (4)	Not Available	Draft CMS, awaiting decision document (12)	Medium	D	None (12)
X-344A Settling Tank	Quadrant SWMU Group 2	6304	1958-Present (22)	None (18)	Concrete tank measured 16 x 16 x 16 ft. Two feet of surrounding tank were removed for removal.	Risk-based Closure Submittal and Amendment to RCRA Closure Plan (August 1995) (18)	Low	B	Tank and surrounding soil removed during RCRA closure (18)
X-344A/B/C Uranium Hexafluoride Sampling Facility	Quadrant SWMU Group 2	6304	C: 1958-1986 (22)	Groundwater: Arsenic, Beryllium (4)	Not Available	Draft CMS, awaiting decision document (12)	Medium		None (12)
X-344D HF Neutralization Pit	Quadrant SWMU Group 2	6304	1958-1986 (17)	None (12)	Not Applicable (8)	Draft CMS, awaiting decision document (12)	Medium	D	None (12)
X-344E Gas Ventilation Stack	Quadrant	6304	1958-Present (8)	None (8)	Not Applicable (8)	DOCC, no further action required (8)	Not Evaluated		None (8)
X-344F Safety Building	Quadrant	6304	1958-Present (8)	None (8)	Not Applicable (8)	DOCC, no further action required (8)	Not Evaluated		None (8)
X-533A-J Switchyard and Associated Buildings	Quadrant SWMU Group 1	6304	A-F: 1954,55-Present (17); H: 1955-Present (17); G, J: Unknown (17)	Soil: Arsenic, Aroclor-1260 (12)	15 cu. yd. Arsenic, 450 cu. yd. Aroclor-1260 (12)	Draft CMS, awaiting decision document (12)	Medium		None (12)
X-605H Booster Pump House and Appurtenances, X-605I Chlorine Building, X-605J Diesel Generator Building	Quadrant	6304	H, J: 1954-Present (17); I: 1954-Present (17)	None (8)	Not Applicable (8)	DOCC, no further action required (8)	Not Evaluated		None (8)
X-611 Water Treatment Plant Appurtenances	Quadrant	6304	1954-Present (17)	None (8)	Not Applicable (8)	DOCC, no further action required (8)	Not Evaluated		None (8)
X-611A Lime Sludge Lagoons	Quadrant	6304	1954-1960 (22)	Beryllium, Chromium, PCBs in sludge (15)	295,000 cu. yd. (15)	Draft Final CMS, awaiting decision document (15)	Medium	E	None (15)
X-611B Sludge Lagoon	Quadrant	6304	1960-Present (22)	None (8)	Not Applicable (8)	DOCC, no further action required (8)	Not Evaluated		None (8)
X-618 North Holding Pond Storage Building	Quadrant	6304	1981-Present (17)	None (8)	Not Applicable (8)	DOCC, no further action required (8)	Not Evaluated		None (8)
X-630-1 Recirculating Water House and X-630-2 A&B Cooling Towers	Quadrant SWMU Group 2	6304	1954-Present (8)	Groundwater: Arsenic, Beryllium (4)	Groundwater = Not Available	Draft CMS, awaiting decision document (12)	Low	D	None (12)
X-630-3 Acid Handling Station	Quadrant SWMU Group 2	6304	1953-Present (8)	Soil: Benzo(a) Pyrene, Aroclor-1254 (12)	250 cu. yd. (12)	Draft CMS, awaiting decision document (12)	Low		None (12)

Note: Shading Denotes Items that are Either Completed or In-Progress (and match those included on the Facilities Data Call).

Table 3.1-1 PORTS Principal Contaminants of Concern

Description	Location	ADS #	Dates of Operation	COCs	Acres/Vol.	Regulatory Phase	Relative Risk	Category (*)	Cleanup Actions Completed
X-640-1 Pump House and Associated Underground Diesel Storage	Quadrant	IV6304	1960-Present (17)	None (8)	Not Applicable (8)	DOCC, no further action required (8)	Not Evaluated		None (8)
X-734 Old Sanitary Landfill Construction Spoils Landfill Old Construction Spoils Land	Quadrant SWMU Group 4	6304	1968-1981 (22)	Soil: Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene, Beryllium, Aroclor-1260 (12); Groundwater: Arsenic, Beryllium (4)	Soil = 284,500 cu. yd.; Groundwater = Not Available (12)	Draft CMS, awaiting decision (12)	Medium	E	None (12)
X-735 Sanitary Landfill (North)	Quadrant	IV6304	1981-1991 (26)	Groundwater: Arsenic, Beryllium (4)	Not Available (4)	Draft Final RFI (4)	Low	B	Northern Portion RCRA-Closure plan submitted (27)
X-735 Sanitary Landfill (South)	Quadrant	IV6304	1981-Present (27)	Soil: None; Groundwater: Arsenic (4)	Not Available (4)	Draft Final RFI (4)	Low		Southern Portion solid waste plan submitted (27)
X-744B Salt Storage Building	Quadrant	IV6304	1979-Present (8)	None (8)	Not Applicable (8)	DOCC (8)	Not Evaluated		
X-744W Surplus and Salvage Warehouse	Quadrant SWMU Group 4	6304	1957-Present (22)	Soil: Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene, Aroclor-1254, Aroclor-1260 (4)	Soil = 20 cu. yd. (12); Groundwater = Not Available	Draft CMS, awaiting decision (12)	Low	A	None (12)
X-745B Process Gas Yard	Quadrant SWMU Group 2	6304	1953-Present (22)	Soil: PAHs (Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene, Aroclor-1254, Aroclor-1260 (4)	719 cu. yd. LLW, 1177 cu. waste (12)	Draft CMS, awaiting decision (12)	Medium	D	None (12)
X-745E Process Gas Yard	Quadrant SWMU Group 2	6304	1979-Present (22)	None (4)	Not Applicable	Draft CMS, awaiting decision (12)	Low		None (4)
X-745F Process Gas Yard	Quadrant SWMU Group 2	6304	1974-Present (22)	Soil: None (12); Groundwater: Arsenic (4)	Not Available (12)	Draft CMS, awaiting decision (12)	Medium	D	None (12)
X-747H Northwest Surplus and Yard	Quadrant SWMU Group 3	6304	1978-Present (22)	Soil: Beryllium, PAHs (12); Groundwater: Arsenic (4)	Soil = 4,041 cu. yd. (12); Groundwater = Not Available	Draft CMS, awaiting decision (12)	Medium	D	None (12)
X-752 Hazardous Waste Storage Basins	Quadrant SWMU Group 1	IV6304	1980-Present (22)	Groundwater: Arsenic, Beryllium (4)	Not Available	Draft Final RFI (4)	Medium		RCRA closure completed (31)
Chemical and Petroleum Containment	Quadrant SWMU Group 1	6304	1975-1985 (8)	None (12)	Not Applicable (8)	Draft CMS, awaiting decision (12)	Low		None (12)
Mount Gilead Cemetery	Quadrant	IV6304	Not Applicable	None (8)	Not Applicable (8)	DOCC, no further action required (8)	Not Evaluated		None (8)
North Drainage Ditch and X-North Holding Pond	Quadrant SWMU Group 5	6304	NDD: 1953-Present (17); X-230L: 1953-Present (22)	Sediment: Arsenic, Beryllium, Max Aroclor-1260, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenz(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene, Aroclor-1254, Aroclor-1260 (4)	Sediment = 2090 cu. yd. (12)	Draft CMS, awaiting decision (12)	Medium	E	None (12)
Northeast Drainage Ditch	Quadrant SWMU Group 5	6304	1953-Present (8)	Soil: PAHs; Sediment: Arsenic, Beryllium, PAHs (12)	Soil = 2200 cu. yd.; Sediment = 2090 yd. (12)	Draft CMS, awaiting decision (12)	High	E	None (12)
Old Northwest Firing Range	Quadrant	IV6304	1953-1979 (22)	None (4)	Not Applicable (4)	Draft Final RFI (4)	Low		None (4)
Railroad Spur Yard Storage	Quadrant SWMU Group 3	6304	1953-1975 (22)	Soil: Beryllium, Arsenic (12); Groundwater: Arsenic (4)	Soil = 335 cu. yd.; Groundwater = Available (12)	Draft CMS, awaiting decision (12)	Medium		None (12)
Recirculating Cooling Water System	Quadrant	IV6304	1954-Present (8)	Sample results included with X-Recirculating Water Pump House	See X-630-1 Recirculating Water Pump House	Draft CMS, awaiting decision (12)	Not Evaluated		None (12)
Sanitary Sewer System, X-614 Lift Station	Quadrant	IV6304	1953-Present (8)	Sample results included with new sanitary sewers (4)	Not Applicable (4)	Draft Final RFI (4)	Low		None (4)
Storm Sewer System	Quadrant	IV6304	1951-Present (22)	None (4)	Not Applicable (4)	Draft Final RFI (4)	Not Evaluated		None (4)
Transformer Cleaning/Storage	Quadrant SWMU Group 1	6304	1970-Present (22)	Soil: Arsenic, Aroclor-1260, U Antimony (12)	296 cu. yd. of solid waste, of LLW, 148 cu. yd. of mix (12)	Draft CMS, awaiting decision (12)	Low		None (12)

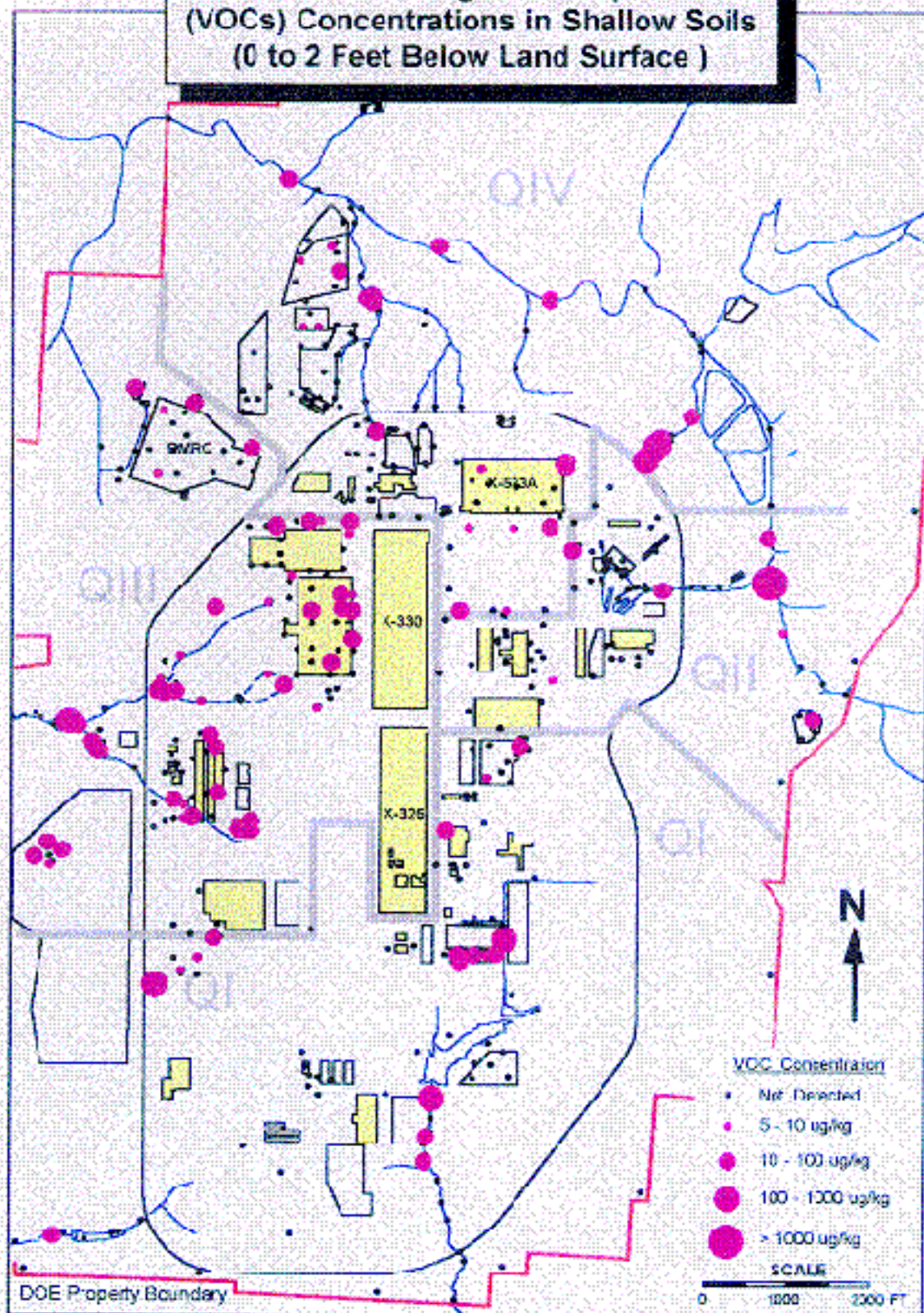
Note: Shading Denotes Items that are Either Completed or In-Progress (and match those included on the Facilities Data Call).

Table 3.1-2 References

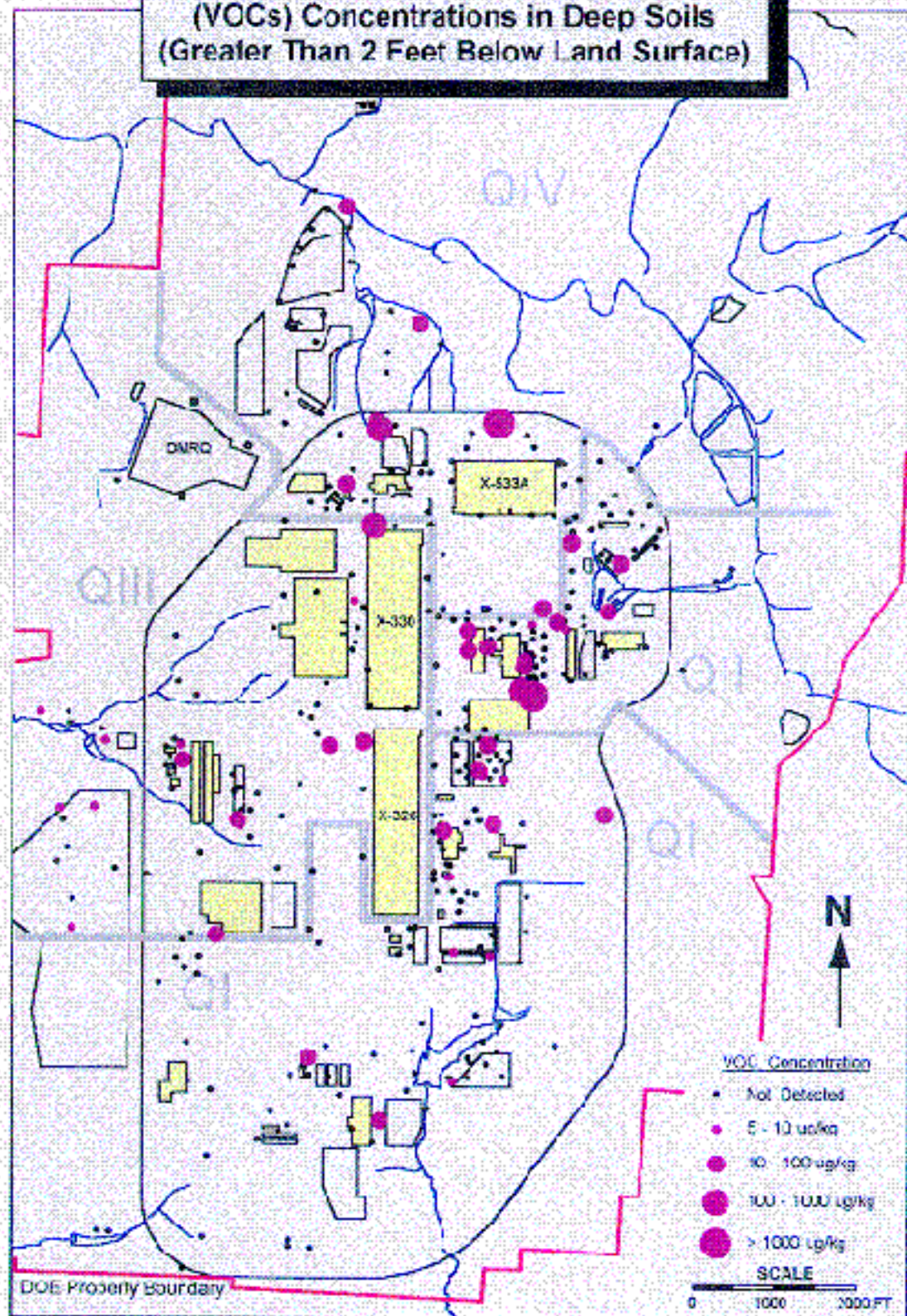
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1	DOE 1994a	<i>Quadrant I RFI Draft Report</i> , DOE/OR11-1231/D2, June 20, 1994.
2	DOE 1994b	<i>Quadrant II RFI Draft Report</i> , DOE/OR11-1232/D2, June 20, 1994.
3	DOE 1994c	<i>Quadrant III RFI Draft Report</i> , September 16, 1994.
4	DOE 1994d	<i>Quadrant IV RFI Draft Report</i> , DOE/OR11-1308/V1 & D2, September 16, 1994.
5	DOE 1990a	<i>Quadrant I Description of Current Conditions</i> , September 7, 1990.
6	DOE 1990b	<i>Quadrant II Description of Current Conditions</i> , September 7, 1990.
7	DOE 1992a	<i>Quadrant III Description of Current Conditions</i> , February 1992.
8	DOE 1990c	<i>Quadrant IV Description of Current Conditions</i> , September 7, 1990.
9	DOE 1994e	<i>Quadrant I Draft CAS/CMS Report</i> , June 2, 1994.
10	DOE 1994f	<i>Quadrant II Draft CAS/CMS Report</i> , DOE/OR/12-1223/D1, March 2, 1994.
11	DOE 1995a	<i>Quadrant III Draft CAS/CMS Report</i> , DOE/OR/12-1360/V2 & D1, April 21, 1995.
12	DOE 1995b	<i>Quadrant IV Draft CAS/CMS Report</i> , DOE/OR/12-1332/D1, April 14, 1995.
13	DOE 1995c	<i>X-705 A/B CAS/CMS Report</i> , DOE/OR/12-1239 & D2, July 29, 1995.
14	DOE 1994g	<i>Peter Kiewit Landfill Draft CAS/CMS Report</i> , DOE/OR/12-1295 & D2, July 29, 1994.
15	DOE 1994h	<i>X-611A Draft CAS/CMS Report</i> , DOE/OR/1087 & V2, July 13, 1994.
16	DOE 1995d	<i>X-749/X-120 Groundwater Preliminary Draft Final CAS/CMS Report</i> , DOE/OR/12-1247 & D2, September 29, 1995.
17	DOE 1993a	<i>Report for Environmental Audit Supporting Transition</i> , DOE/OR/1087 & V2, June 1993.
18	DOE 1995e	<i>X-344A Risk-based Closure Plan</i> , DOE/OR/11-1280 & D, August 1995.
19	DOE 1995f	<i>X-231B Technology Demonstration and Closure</i> , March 1995.
20	DOE 1992b	<i>Closure Plan for the X-700 Tank No. 6</i> , July 1992.
21	DOE 1992c	<i>Closure Plan for the X-700 Tank No. 8</i> , July 1992.
22	DOE 1994i	<i>Baseline Ecological Risk Assessment</i> , DOE/OR11-1316/D1, December 18, 1994.
23	DOE 1994j	<i>Closure Plan for X-749 (Northern)</i> .
24	DOE 1994k	<i>Closure Plan for X-749 (Southern)</i> .
25	DOE 1995g	<i>Closure Plan for X-744Y</i> , April 1995.

26	DOE 1992d	<i>Closure Plan for the X-735 Landfill (Northern Portion)</i> , December 1992.
27	DOE 1995h	<i>Final Closure/Post-Closure Plan for the X-735 Industrial Solid Waste Landfill Facility (Southern Portion)</i> , DOE/OR/12-1359 & D1, March 1995.
28	DOE 1994i	<i>Interim Measures Plan for the Peter Kiewit Landfill at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio</i> , DOE/OR/11-1262 & D4, August 23, 1994.
29	DOE 1994l	<i>Consolidated Closure Plan for the X-701B Holding Pond and Sludge Containment Ponds</i> , DOE/OR/12-1321 & D2, October 1994.
30	DOE 1989	<i>Groundwater Quality Assessment of Four RCRA Units</i> , May 1989.
31	DOE 1992	<i>Closure Plan for the X-752 Hazardous Waste Storage Unit</i> , ES/ER-28 & D2, May 1992.

**Total Volatile Organic Compounds
(VOCs) Concentrations in Shallow Soils
(0 to 2 Feet Below Land Surface)**

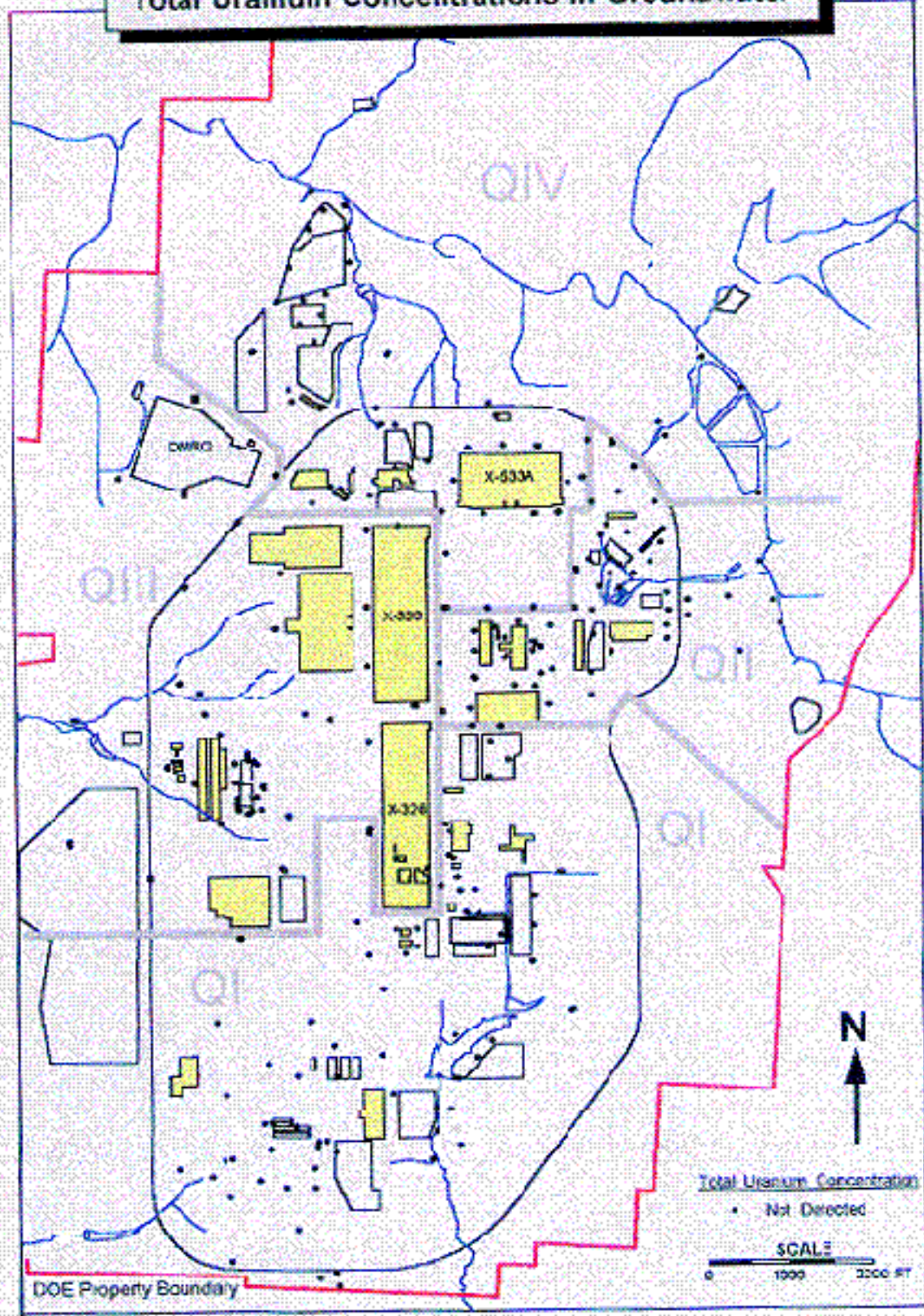


**Total Volatile Organic Compounds
(VOCs) Concentrations in Deep Soils
(Greater Than 2 Feet Below Land Surface)**

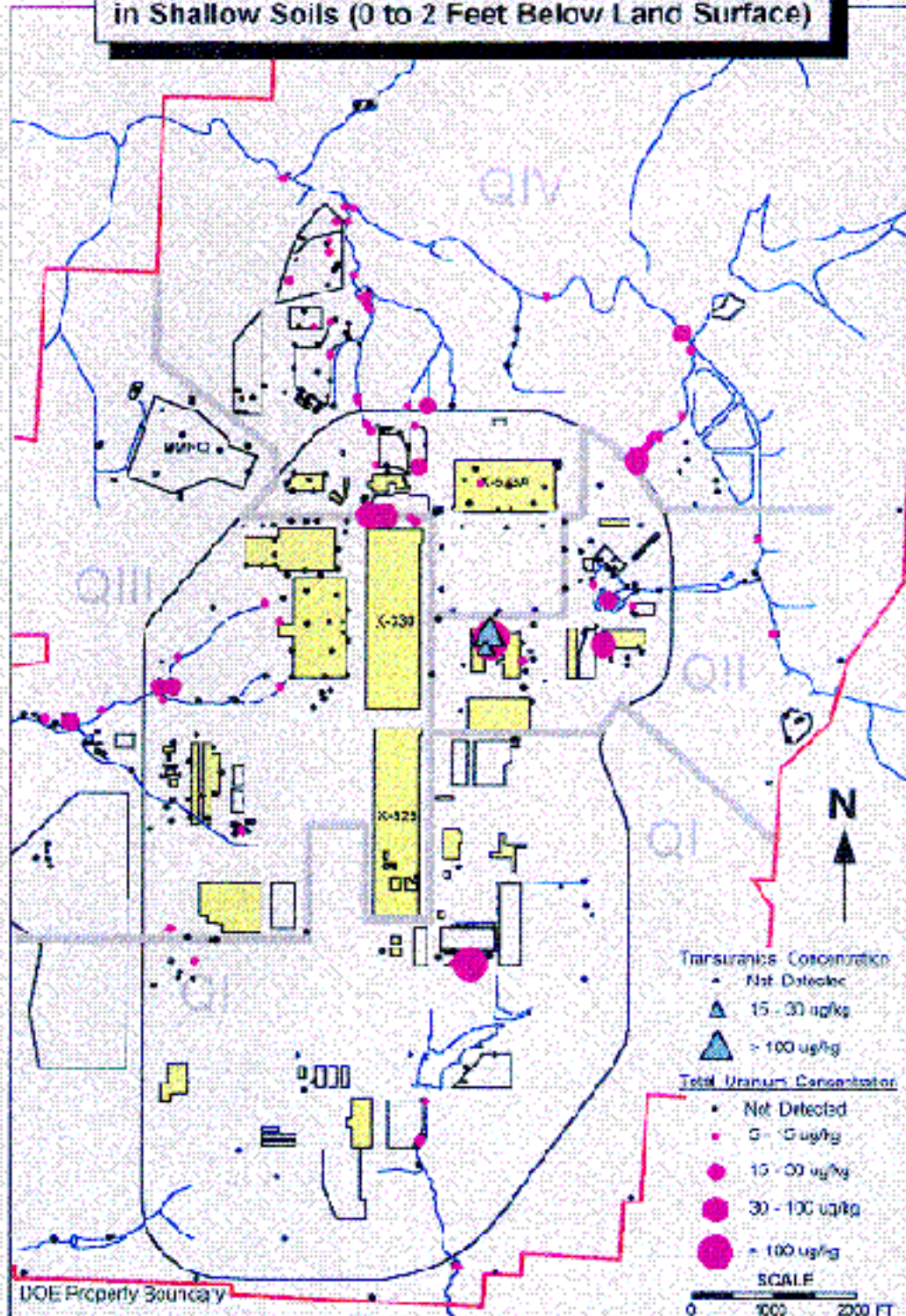


DOE Privacy Bureau

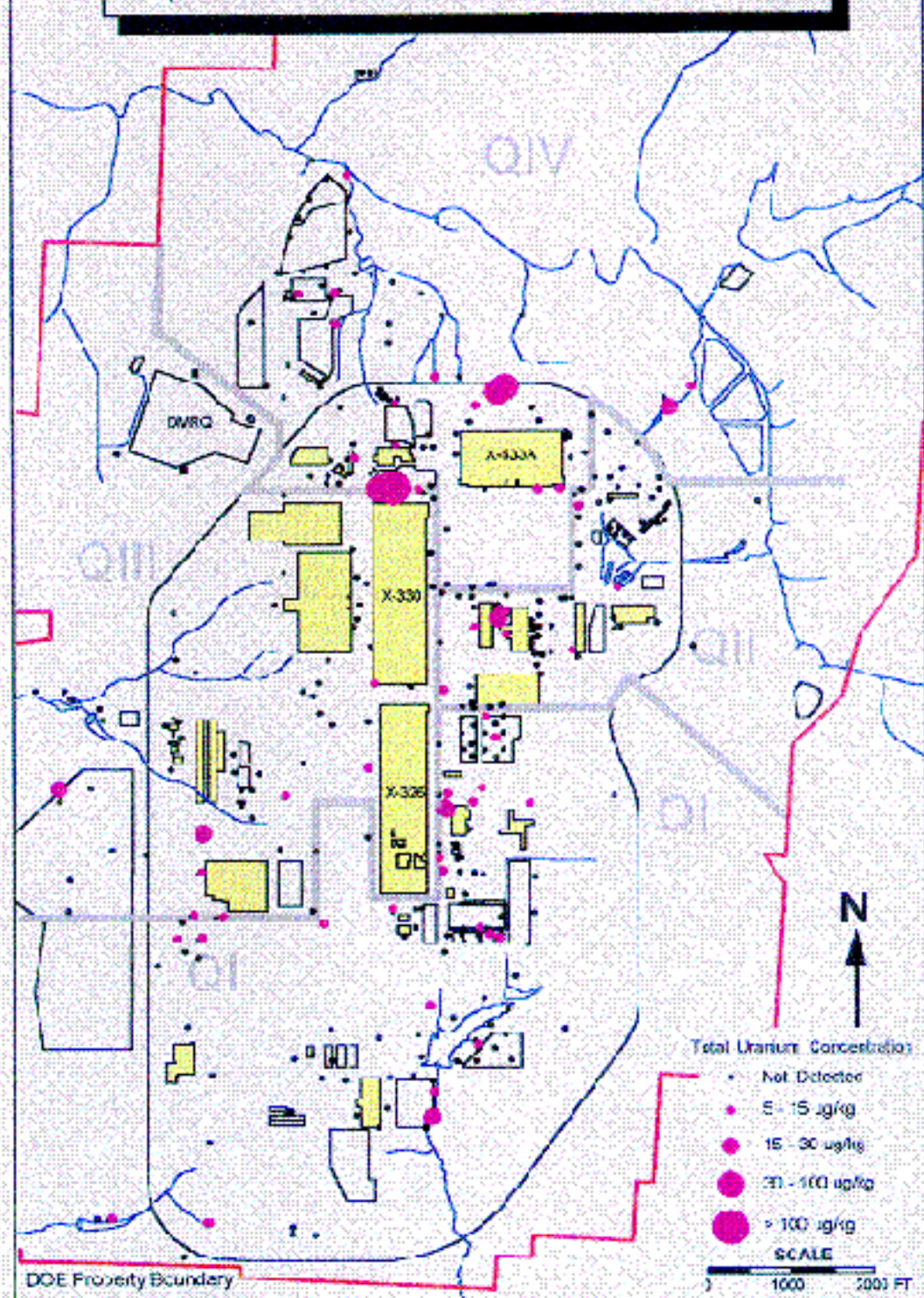
Total Uranium Concentrations in Groundwater



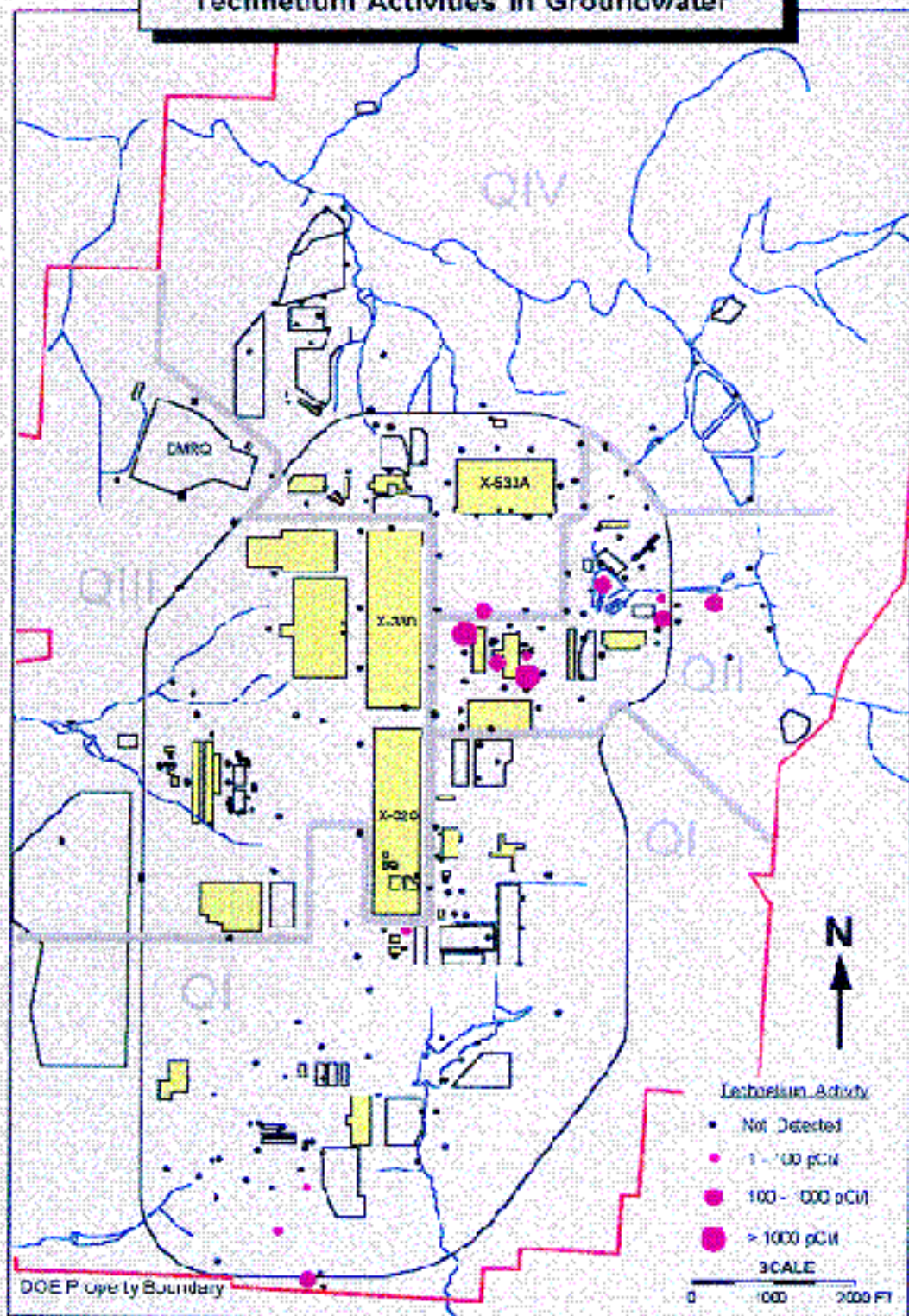
Total Uranium and Transuranics Concentrations in Shallow Soils (0 to 2 Feet Below Land Surface)



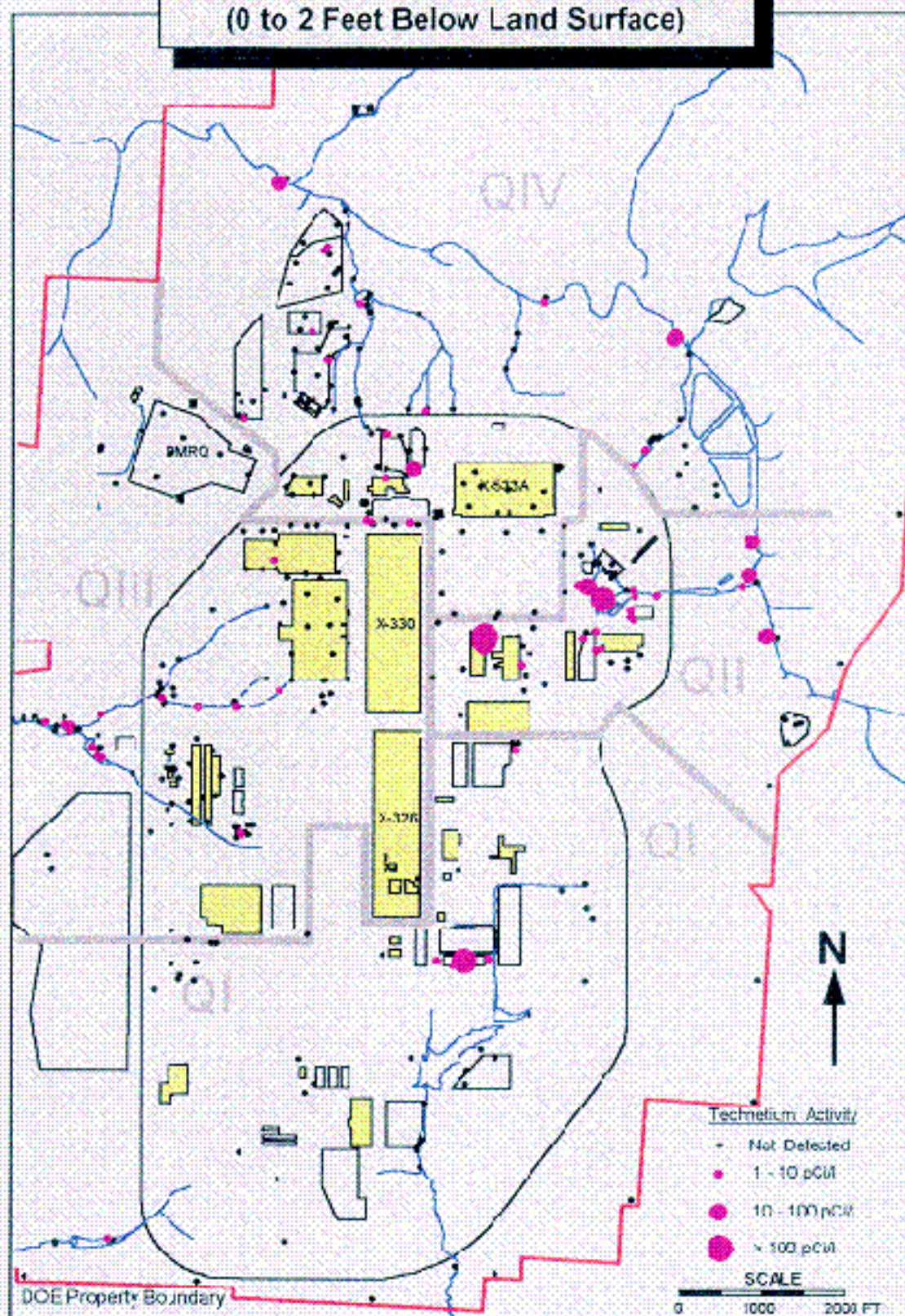
**Total Uranium Concentrations in Deep Soils
(Greater Than 2 Feet Below Land Surface)**



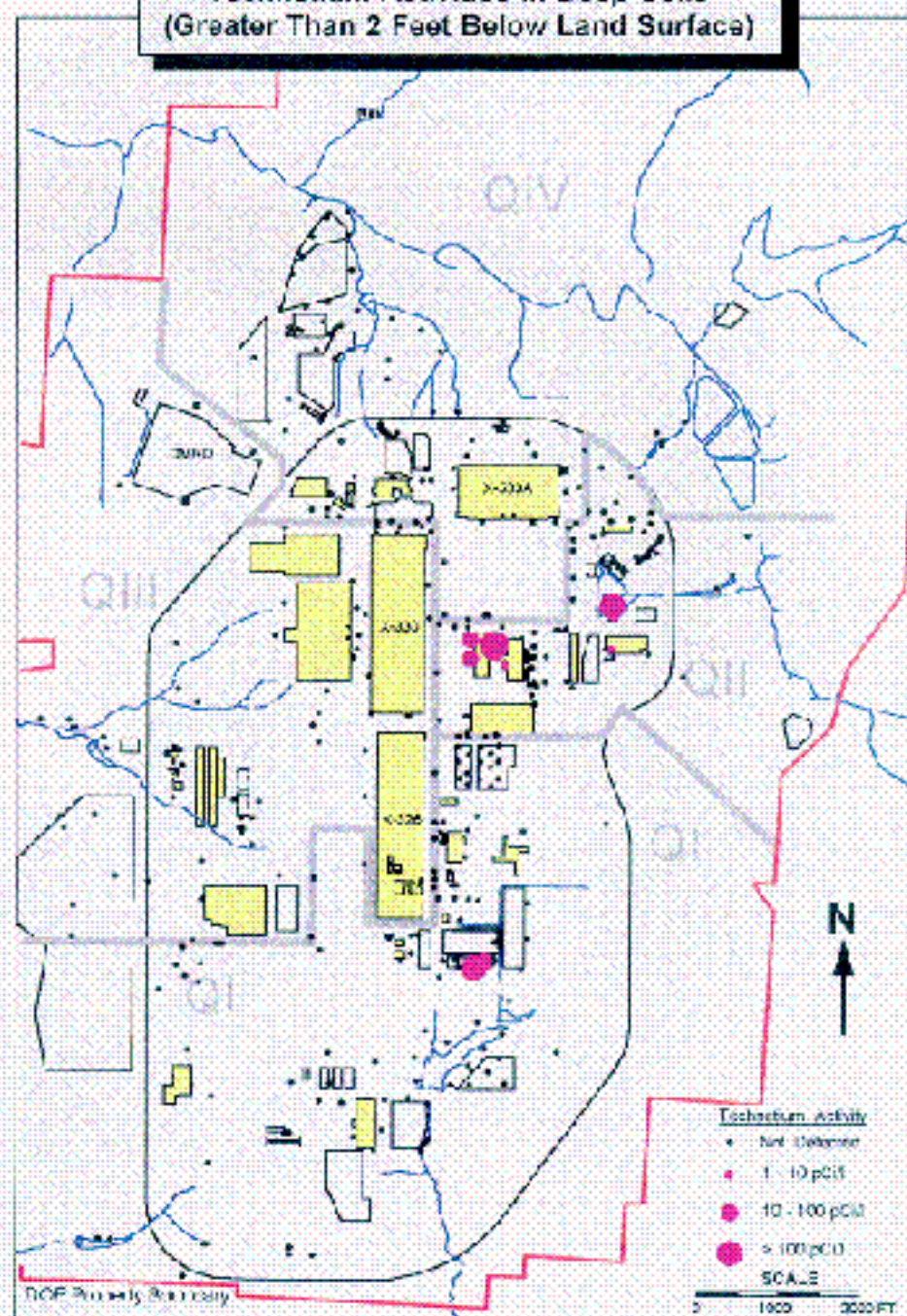
Technetium Activities in Groundwater



Technetium Activities in Shallow Soils (0 to 2 Feet Below Land Surface)



**Technetium Activities in Deep Soils
(Greater Than 2 Feet Below Land Surface)**



4.0 SITE RELATIVE RISKS

This chapter presents a qualitative evaluation of relative risk for each contaminated or potentially contaminated Solid Waste Management Unit (SWMU) identified at PORTS in calendar years 1990 and 1995.

4.1 BACKGROUND

The relative risk site evaluation frame work utilized herein and developed for the U.S. Department of Defense Environmental Cleanup Program, Relative Risk Site Evaluation Concept, generates a High, Medium, or Low rating for each contaminated or potentially contaminated site at PORTS. This rating is based on a qualitative evaluation of contaminants, pathways and human or ecological receptors in three media most likely to result in significant exposure: groundwater, surface water/sediment, and surface soils. Each medium of concern at PORTS is evaluated by the framework using three key factors that provide an estimate of the relative risk that a site poses to human health and/or the environment. These factors are: the contaminant hazard factor (CHF), the migration pathway factor (MPF), and the receptor factor (RF). A conceptual representation of this evaluation approach is presented in Figure 4.1-1.

The CHF for a medium is rated as significant, moderate, or minimal, based on the comparison of the concentration of site contaminants in the medium with standards based on the toxic potency of the contaminant. The MPF is rated as evident, potential or confined, based on the likelihood of contaminants being present at or moving towards a point of exposure. The RF is rated as identified, potential or limited based on the likelihood of existence of receptors at exposure points associated with the site. These factors are then combined by means of a decision matrix to place the site into a category of High, Medium, or Low for the contaminated medium. The highest rating resulting from the evaluation of the three media becomes the relative risk category of the site. A flow chart summarizing these decision points in the relative risk site evaluation process is depicted in Figure 4.1-2.

The relative risk assessments for each SWMU present in this chapter are shown in Table 4.1-1 which summarizes current relative risk (as of December 1995). Items in the table which are completed or are in progress are shaded. Table 4.1-2 lists DOE reference documents used in Table 4.1-1. Ecological risk was not evaluated because no critical habitat or other environments are present at or in the vicinity of PORTS. Therefore, the relative risk scores presented in Table 4.1-1 are based solely on risks to human health. Assumptions and uncertainties associated with the rating applied to the CHF, MPF, and RF factors are discussed below in Section 4.2. In addition, information concerning contaminated groundwater at PORTS is presented in Section 4.2.4.

4.2 ASSUMPTIONS AND UNCERTAINTIES FOR RELATIVE RISK SITE EVALUATION

4.2.1 Contaminant Hazard Factor Scores

Contaminant hazard factor (CHF) scores were based on all potential contaminants for which sampling information was available. For past relative risk (1990), the contaminant data came from the PORTS Groundwater Quality Assessment (GWQA) report and the Description of Current Conditions (DOCC) reports. All chemicals detected and their associated maximum concentrations were used to determine the CHF's at

Figure 4.1-1
Flow Diagram of the Relative Risk Site Evaluation Framework

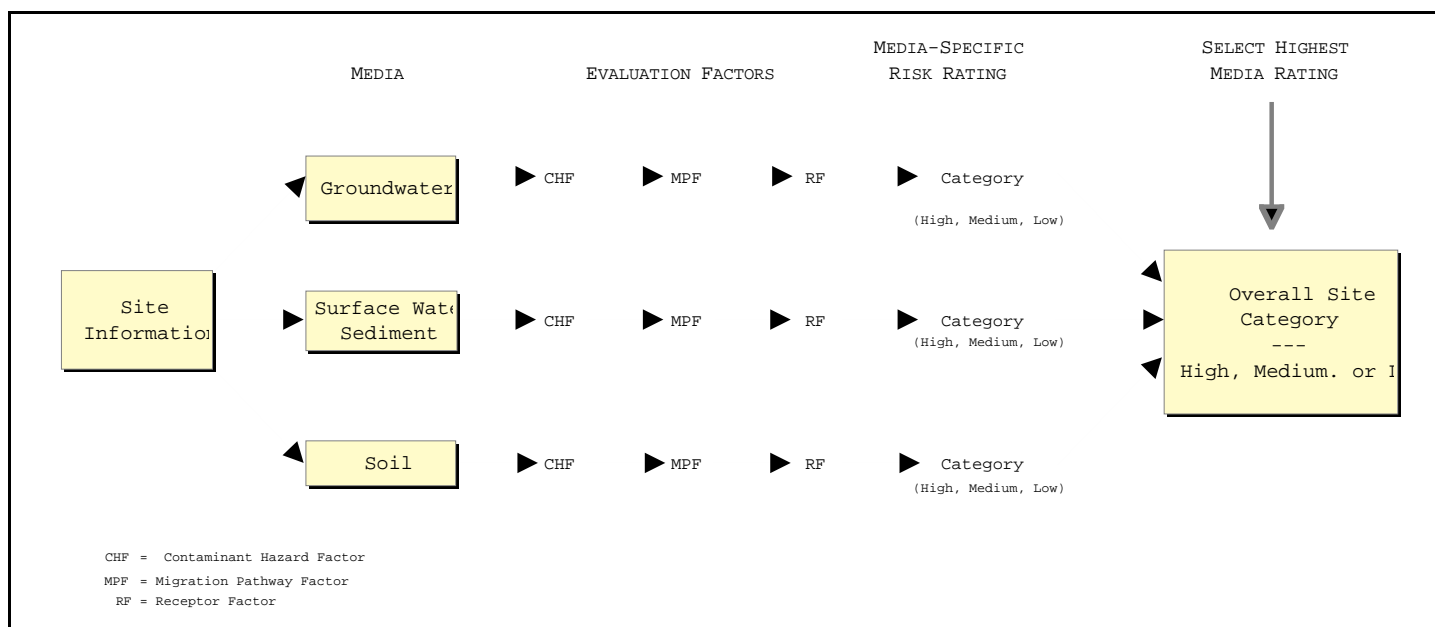


Figure 4.1-2
Flow Diagram of the Relative Risk Site Evaluation Framework : Decision Flowchart

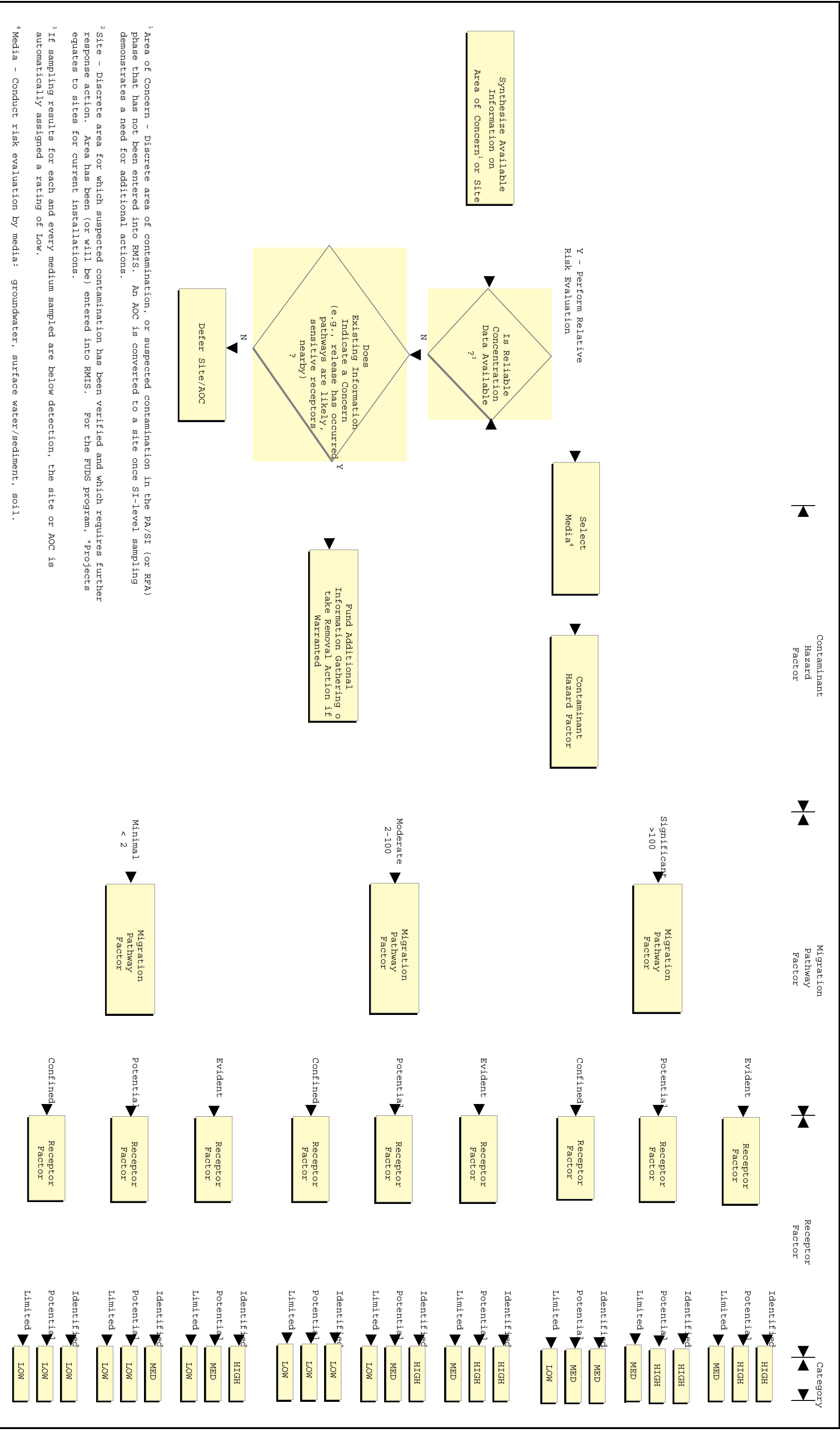


Table 4.1-1 1995 Risk Levels at PORTS

Description	Location	Public	Worker	Ecological	1995 Relative Risk	Comments/ References (*)
X-103 Auxiliary Office Building	Quadrant I	Low	Low	Not Evaluated	Low	No COCs identified. (1)
X-104A Indoor Firing Range	Quadrant I	Low	Low	Not Evaluated	Low	No COCs for workers (1). UBK model for lead residential children (1), but model was not x
X-120 Old Training Facility	Quadrant I	Low	Low	Not Evaluated	Low	Soil: Arsenic (1)(9); Groundwater: See x-74 Groundwater Plume.
X-230K South Holding Pond	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	Soil: Beryllium; Groundwater: See 5-Unit A Plume.
X-230K South Holding Pond Waste Pile	Quadrant I	Low	Low	Not Evaluated	Low	Soil: Beryllium; Groundwater: See 5-Unit A Plume.
X-231A Southeast Oil Biodegradation Plot	Quadrant I	Low	Low	Not Evaluated	Low	Soil: PCBs, Uranium, Technetium (1); Ground Area Groundwater Plume
X-231B Southwest Oil Biodegradation Plot	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	Unit has been remediated under RCRA. (19)
X-300 Plant Control Facility	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	None
X-600 Coal Fired Steam Plant; X-600A Coal Storage Coal-Pile Runoff Treatment Facility	Quadrant I	Medium	Medium	Not Evaluated	Medium	Soil: Arsenic (1); Groundwater: See 5-Unit Plume; Surface Water: Arsenic (1); Sediment Inorganics in surface water drive relative risk
X-626 Recirculating Cooling Water Pump House and Quaking Tower	Quadrant I	Low	Low	Not Evaluated	Low	Soil: Beryllium (1); Groundwater: TCE and Note that groundwater at X-626 was included w plume in the Draft Quadrant I CMS. (9)
X-710 Technical Services Building/Neutralization Building	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	Groundwater: See 5-Unit Area Groundwater Plume
X-741 Oil Drum Storage Facility	Quadrant I	Low	Low	Not Evaluated	Low	No COCs identified. (1)
X-747F Miscellaneous Material Storage Yard	Quadrant I	Low	Low	Not Evaluated	Low	Soil: Arsenic (1); Groundwater: Metals (1)(9)
X-749 North Contaminated Materials Disposal Facility	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	None
X-749 South Contaminated Materials Disposal Facility	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	None
X-749 Contaminated Materials Disposal Facility/X-Plume	Quadrant I	High	High	Not Evaluated	High	Groundwater: TCE and Other VOCs (16)
X-749A Classified Materials Burial Grounds	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	Groundwater: See 5-Unit Area Groundwater Plume
X-750 Fuel Station	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	None
X-751 Mobile Equipment Maintenance Shop	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (1)
X-760 Pilot Investigation Building	Quadrant I	Low	Low	Not Evaluated	Low	Groundwater: See 5-Unit Area Groundwater Plume
X-1007 Fire Station	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	None
X-1020 Engineering Operations Center	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	None
X-1107AV Interplant Portal (Vehicular)	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	None
X-2230M Southwest Holding Pond	Quadrant I	Medium	Medium	Not Evaluated	Medium	Soil: Arsenic (1); Sediment: PAHs, Arsenic
X-3000 Central Control Building	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	None
X-3001 Process Building (GCEP) - Inactive	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	None
X-3002 Process Building (GCEP) - Inactive	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	None
X-3346 Feed and Withdrawal Facility - Inactive	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	None
5-Unit Area Groundwater Plume	Quadrant I	Medium	High	Not Evaluated	High	Groundwater: TCE, Other VOCs, Metals (1). I groundwater drive relative risk.
Big Run Creek	Quadrant I	Medium	Medium	Not Evaluated	Medium	Surface Water: Arsenic (1); Sediment: Arsenic surface water drive relative risk.
GCEP Underground Storage Tank	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (1)
Peter Kiewit Landfill/XT-847 Warehouse	Quadrant I	Medium	Medium	Not Evaluated	Medium	Soil: Arsenic, Aroclor-1260 (14); Surface Water: Chloride, Other VOCs, Metals, Uranium (14); Metals (14). Inorganics in groundwater drive
Quadrant I Sanitary Sewer System/X-614D Sewage Lift Station	Quadrant I	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	COCs at SASW sampling locations were included SWMU (1)
Quadrant I Storm Sewer System	Quadrant I	Low	Low	Not Evaluated	Low	Groundwater: Arsenic in well STSW-103G (1); other STSW sampling locations were included w SWMU (1)
X-100L Environmental Control Trailer	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-101A Credit Union Trailer	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-105 Electronic Maintenance Building	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-109B Personnel Monitoring Building	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-116 Storage Trailer	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-230J1 East Environmental Sampling Building	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-230J7 East Holding Pond and Oil Separation Basin	Quadrant II	Medium	Medium	Not Evaluated	Medium	Sediment: PAHs, Metals. (2) Sediment drives
X-343 Feed Vaporization and Sampling Facility	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	Soil: PAHs (2)
X-345 Special Nuclear Material Storage Building	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-633 Recirculating Water Pump House and Cooling	Quadrant II	Medium	Medium	Not Evaluated	Medium	Groundwater: Chromium, Other Metals, 1,1-dic
X-640-2 Elevated Water Tank	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-700 Chemical Cleaning Facility	Quadrant II	Low	Low	Not Evaluated	Low	Soil: PCBs, PAHs, Uranium; Groundwater: Se
X-700 Tank No. 6	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	RCRA closure (20)
X-700 Tank No. 7	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	RCRA closure
X-700 Tank No. 8	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	RCRA closure (21)
X-700 CT Chemical and Petroleum Storage Containment	Quadrant II	Low	Low	Not Evaluated	Low	Soil: PCBs, PAHs, Uranium; Groundwater: Se
X-700A Air Conditioning Equipment Building	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-700T TCE/TCA Outside Storage Tank	Quadrant II	Low	Low	Not Evaluated	Low	Soil: PCBs, PAHs, Uranium; Groundwater: Se
X-701 BP Northeast Oil Biodegradation Plot	Quadrant II	Low	Low	Not Evaluated	Low	No COCs identified. (2)
X-701A Lime House	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-701B East and West Retention Basins	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (10)
X-701B Holding Pond	Quadrant II	Medium	Low	Not Evaluated	Medium	Groundwater: VOC (10)
X-701C Neutralization Pit	Quadrant II	Low	Low	Not Evaluated	Low	Groundwater: See 7-Unit Area (2)
X-701D Water De-ionization Facility	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified (6)
X-701E Neutralization Building	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified (6)
X-701F Effluent Monitoring Building	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified (6)
X-705 Decontamination Building	Quadrant II	Low	Low	Not Evaluated	Low	Groundwater: See 7-Unit Area (10)
X-705A Radioactive Waste Incinerator/X-705B Cont Burnables Storage Lot	Quadrant II	Low	Medium	Not Evaluated	Medium	Soil: Uranium (13); Groundwater: See 7 Unit (2). Uranium in surface soil drives relative
X-705D Heating Booster Pump Building	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-720 Maintenance Building	Quadrant II	Low	Low	Not Evaluated	Low	Soil: Arsenic, TCE; Groundwater: See 7 Unit (2)
X-720 Neutralization Pit	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	Soil: Arsenic, TCE; Groundwater: See 7 Unit (2)
X-720A Maintenance Building Gas Manifold Shed	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-720B Radio Base Station Building	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-720C Paint and Oil Storage Building	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-744 Retrievable Waste Storage Area	Quadrant II	Low	Low	Not Evaluated	Low	Soil: Technetium (2)
X-744G Bulk Storage Building	Quadrant II	High	High	Not Evaluated	High	Groundwater (2)
X-744H Bulk Storage Building	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-744J Bulk Storage Building	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-744L Store and Maintenance Warehouse	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-744Y Mixed Waste Storage Yard	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	Soils: Uranium, PAHs; Groundwater: Arsenic TCE and Other VOCs (included with X-744G) (2)
X-747A, B, C, D, and E Material Storage Yards	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (6)
X-747G Northeast Contaminated Material Storage Yard	Quadrant II	Low	Low	Not Evaluated	Low	No COCs identified. (2)
7 Unit Investigative Area	Quadrant II	High	High	Not Evaluated	High	Groundwater: VOCs (2).
Barren Area	Quadrant II	Low	Low	Not Evaluated	Low	Soil: Arsenic
East Drainage Ditch	Quadrant II	Low	Medium	Not Evaluated	Medium	Soil: PCBs, Arsenic, Uranium; Sediment: PCBs, Beryllium (2). Inorganics in surface soil an relative risk.
Little Beaver Creek	Quadrant II	Medium	Medium	Not Evaluated	Medium	Soil: PCBs, PAHs, Uranium; Sediment: PCBs, (2). Inorganics in surface soil and sediment

Note: Shading Denotes Items that are Either Completed or In-Progress
(and match those included on the Facilities Data Call),

Table 4.1-1 1995 Risk Levels at PORTS

Description	Location	Public	Worker	Ecological	1995 Relative Risk	Comments/ References (*)
Process Waste Lines	Quadrant II	Low	Low	Not Evaluated	Low	Groundwater: See 7-Unit Investigative Area I
Sanitary Sewer System and X-614P Northeast Sewage Lift Station	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (2)
Storm Sewer System (D & E)	Quadrant II	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (2)
X-108E C-Portal	Quadrant III	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (7)
X-109A Personnel Monitoring Building/Waste Oil Recycling Facility	Quadrant III	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (7)
X-111A Monitoring Portal and X-111B Portal North	Quadrant III	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (7)
X-230J3 West Environmental Sampling Building and Containment Basin	Quadrant III, SWMU Group 4	Medium	Medium	Not Evaluated	Medium	Soil: Semi-Volatile, PAHs, PCBs, Uranium-238 in groundwater drive relative risk.
X-230J5 West Holding Pond and Oil Separation Basin	Quadrant III, SWMU Group 4	Medium	Medium	Not Evaluated	Medium	Soil: Semi-Volatile, PAHs, PCBs, Uranium-238; Volatile, PAHs, PCBs, Uranium-238, Metals (11) sediment drive relative risk.
X-326 Process Building	Quadrant III, SWMU Group 1	Medium	Medium	Not Evaluated	Medium	Groundwater.
X-330 Process Building	Quadrant III, SWMU Group 1	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	Groundwater - Arsenic
X-530 A-G Switchyard and Associated Buildings	Quadrant III, SWMU Group 2	Medium	Medium	Not Evaluated	Medium	Soil: Aroclor-1260, PAHs; Groundwater
X-612 Elevated Water Tank	Quadrant III	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (7)
X-615 Abandoned Sanitary Sewer Treatment Facility	Quadrant III, SWMU Group 3	Low	Medium	Not Evaluated	Medium	Soil: Aroclor-1260, Beryllium (3). Inorganic relative risk.
X-616 Effluent Control Facility/ Chromium Sludge	Quadrant III, SWMU Group 3	Low	Low	Not Evaluated	Low	Groundwater: 1,1-dichloroethene (3)
X-740 Waste Oil Handling Facility	Quadrant III, SWMU Group 2	Medium	Medium	Not Evaluated	Medium	Soil: Arsenic; Groundwater: Chlorinated Hydrocarbons (3). Organics in Gallia groundwater drive risk.
X-744N, X-744P, X-744Q Warehouse, and Associated Headquarters Area	Quadrant III	Medium	Medium	Not Evaluated	Medium	Soil: Arsenic, Benzo(a) pyrene.
X-744S, X-744T, X-744U Warehouses	Quadrant III, SWMU Group 3	Low	Low	Not Evaluated	Low	Soil: Aroclor-1260, PAHs, Inorganics.
X-745C West Cylinder Storage Yard	Quadrant III, SWMU Group 2	Low	Medium	Not Evaluated	Medium	Soil: Aroclor-1254 and -1260, PAHs, Arsenic, Surface soil drives relative risk.
X-748 Truck Scales	Quadrant III	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (7)
X-1107 DP, DV, EP, EV Northeast and Northwest Pedestrian Portals	Quadrant III	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (7)
X-2207D Parking Lot/Cylinder Storage Yard A	Quadrant III	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified.
X-2230N West Holding Pond No. 2	Quadrant III, SWMU Group 4	Medium	Medium	Not Evaluated	Medium	Sediments: Metals, PCBs. Sediment drives relative risk.
X-6619 Sewage Treatment Facility	Quadrant III, SWMU Group 2	Medium	Medium	Not Evaluated	Medium	Soil: Arsenic; Groundwater: Arsenic (3).
X-7725 Recycle Assembly Building, X-7745R, Recycle Storage Yard and Initial Construction Bulk Fuel Storage	Quadrant III	Low	Medium	Not Evaluated	Medium	Soil: Metals. Inorganics in surface soil drive risk.
X-7725A Waste Accountability Facility (GCEP) and Corridor (GCEP)	Quadrant III	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	None
X-7726 Centrifuge Training and Test Facility	Quadrant III	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (7)
Don Marquis, Substation, Associated Containment Pits, and Construction Spoils	Quadrant III	High	High	Not Evaluated	High	Sediment: Metals (11). Inorganics in surface soil drive relative risk.
OVEC Storage Area and Microwave Tower	Quadrant III	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (7)
RCW System and Blowdown Line	Quadrant III	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	Samples results included with nearest SWMU for system. (3)
Sanitary Sewer System	Quadrant III	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	Samples results included with nearest SWMU for system. (3)
Storm Sewer System	Quadrant III	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	Samples results included with nearest SWMU for system. (3)
West Drainage Ditch	Quadrant III, SWMU Group 4	Medium	Medium	Not Evaluated	Medium	Soil: Semi-volatile, PCBs, Uranium-238 Sediment: Volatile, PAHs, PCBs, Uranium-238, Metals. Sediment drive relative risk. (11)
X-108H Pike Avenue Portal	Quadrant IV	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (8)
X-114A Firing Range	Quadrant IV	High	High	Not Evaluated	High	No unacceptable risk identified (12). Lead in sediment drive relative risk.
X-205H Parking Lot	Quadrant IV	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (8)
X-230J6 Northeast Holding Pond	Quadrant IV, SWMU Group 5	Medium	Medium	Not Evaluated	Medium	Sediment: Radionuclides, Heavy Metals. All planned to be excavated would be classified as Sediment and Gallia groundwater drive relative risk.
X-230J9 North Environmental Sampling Building	Quadrant IV	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (8)
X-230L North Holding Pond	Quadrant IV	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (12)
X-333 Process Building	Quadrant IV, SWMU Group 1	Medium	Medium	Not Evaluated	Medium	Soil: PAHs, Arsenic, PCBs; Groundwater: Arsenic Surface soil and groundwater drive relative risk.
X-334 Transformer Storage and Cleaning Building	Quadrant IV, SWMU Group 1	Low	Low	Not Evaluated	Low	Soil: Benzo(a)pyrene (12)
X-342A Feed Vaporization and Fluorine Generation Fluorine Storage Building, and X-342C Waste HF Neutralization Pit	Quadrant IV, SWMU Group 2	Low	Medium	Not Evaluated	Medium	Fluoride in surface water drives relative risk.
X-344A Settling Tank	Quadrant IV	Low	Low	Not Evaluated	Low	None (18)
X-344A/B/C Uranium Hexafluoride Sampling Facility	Quadrant IV, SWMU Group 2	Low	Medium	Not Evaluated	Medium	Inorganics in sediment drives relative risk.
X-344D HF Neutralization Pit	Quadrant IV	Medium	Medium	Not Evaluated	Medium	Groundwater.
X-344E Gas Ventilation Stack	Quadrant IV	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (8)
X-344F Safety Building	Quadrant IV	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (8)
X-533A-J Switchyard and Associated Buildings	Quadrant IV	Medium	Medium	Not Evaluated	Medium	Soil: PCBs, Arsenic (12).
X-605H Booster Pump House and Appurtenances, X-605J Building, X-605J Diesel Generator Building	Quadrant IV	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (8)
X-611 Water Treatment Plant and Appurtenances	Quadrant IV	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (8)
X-611A Lime Sludge Lagoons	Quadrant IV	Medium	Medium	Not Evaluated	Medium	Sediment.
X-611B Sludge Lagoon	Quadrant IV	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (8)
X-618 North Holding Pond Storage Building	Quadrant IV	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (8)
X-630-1 Recirculating Water Pump House and X-630-2 Towers	Quadrant IV, SWMU Group 2	Low	Low	Not Evaluated	Low	Soil: Benzo(a)pyrene, PCBs (12)
X-630-3 Acid Handling Station	Quadrant IV, SWMU Group 2	Low	Low	Not Evaluated	Low	Soil: Benzo(a)pyrene, PCBs (12)
X-640-1 Pump House and Associated Underground Dielectric Tanks	Quadrant IV	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (8)
X-734 Old Sanitary Landfill; X-734B Old Construction Spoils Landfill	Quadrant IV, SWMU Group 4	Medium	Medium	Not Evaluated	Medium	Soil: SVOCs, VOCs, Inorganics; Groundwater: Inorganics; Surface Water: SVOCs, VOCs, Inorganics; Sediment: SVOCs, VOCs, Inorganics (12). All drive relative risk.
X-735 Sanitary Landfill (North)	Quadrant IV	Low	Low	Not Evaluated	Low	Industrial: No COCs; Residential: Soil: Arsenic
X-735 Sanitary Landfill (South)	Quadrant IV	Low	Low	Not Evaluated	Low	Industrial: No COCs; Residential: Soil: Arsenic
X-744B Salt Storage Building	Quadrant IV	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (8)
X-744W Surplus and Salvage Warehouse	Quadrant IV, SWMU Group 4	Low	Low	Not Evaluated	Low	Soil: PAHs and PCBs (12)
X-745B Process Gas Yards	Quadrant IV, SWMU Group 2	Low	Medium	Not Evaluated	Medium	Soil: U, PAHs, PCBs (12). X-745E did not require Phase II (4). Surface soil drives relative risk.
745E Process Gas Yards	Quadrant IV, SWMU Group 2	Low	Low	Not Evaluated	Low	No COCs identified. (4)
745F Process Gas Yards	Quadrant IV, SWMU Group 2	Medium	Medium	Not Evaluated	Medium	Groundwater.
X-747H Northwest Surplus and Scrap Yard	Quadrant IV, SWMU Group 3	Medium	Medium	Not Evaluated	Medium	Soil: Beryllium, PAHs (12). PAHs and inorganic drive relative risk.
X-752 Hazardous Waste Storage Facility	Quadrant IV	Medium	Medium	Not Evaluated	Medium	No COCs. Groundwater drive relative risk.
Chemical and Petroleum Containment Basins	Quadrant IV, SWMU Group 1	Low	Low	Not Evaluated	Low	Soil: PAHs (12)
Mount Gilead Cemetery	Group IV	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	No COCs identified. (8)
North Drainage Ditch and X-230L North Holding Pond	Quadrant IV, SWMU Group 5	Medium	Medium	Not Evaluated	Medium	Soil: Uranium, PAHs, Heavy Metals; Sediment: Heavy Metals, PCBs; Surface Water: (Recreation) drive relative risk.
Northeast Drainage Ditch	Quadrant IV	High	High	Not Evaluated	High	Sediment drives relative risk.
Old Northwest Firing Range	Quadrant IV	Low	Low	Not Evaluated	Low	None of the constituents detected in soil from levels above background or considered carcinogenic Groundwater samples not taken. (4)
Railroad Spur Yard Storage Area	Quadrant IV, SWMU Group 3	Medium	Medium	Not Evaluated	Medium	Soil: Benzo(a)pyrene, Beryllium, Arsenic (12)

Note: Shading Denotes Items that are Either Completed or In-Progress (and match those included on the Facilities Data Call),

Table 4.1-1 1995 Risk Levels at PORTS

Description	Location	Public	Worker	Ecological	1995 Relative Risk	Comments/ References (*)
Recirculating Cooling Water System	Quadrant IV	See X-630	See X-630	Not Evaluated	Low	Sample results included with X-630-1 Recircul House (4)
Sanitary Sewer System, X-614B Sewage Lift Station	Quadrant IV	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	Sample results included with nearest SWMU for
Storm Sewer System	Quadrant IV	Not Evaluated	Not Evaluated	Not Evaluated	Not Evaluated	Sample results included with nearest SWMU for
Transformer Cleaning/Storage Pad	Quadrant IV, SWMU Group 1	Low	Low	Not Evaluated	Low	Soil: Arsenic, Vanadium, Aroclor-1260, Uranium, Arsenic, Antimony, Aroclor-1260, Uranium (12)

Note: Shading Denotes Items that are Either Completed or In-Progress
(and match those included on the Facilities Data Call),

Table 4.1-2 References

No	ID	Document
1	DOE 1994a	Quadrant I RFI Draft Report, DOE/OR11-1231/D2, June 20, 1994.
2	DOE 1994b	Quadrant II RFI Draft Report, DOE/OR11-1232/D2, June 20, 1994.
3	DOE 1994c	Quadrant III RFI Draft Report, September 16, 1994.
4	DOE 1994d	Quadrant IV RFI Draft Report, DOE/OR11-1308/V1 & D2, September 16, 1994.
5	DOE 1990a	Quadrant I Description of Current Conditions, September 7, 1990.
6	DOE 1990b	Quadrant II Description of Current Conditions, September 7, 1990.
7	DOE 1992a	Quadrant III Description of Current Conditions, February 1992.
8	DOE 1990c	Quadrant IV Description of Current Conditions, September 7, 1990.
9	DOE 1994e	Quadrant I Draft CAS/CMS Report, June 2, 1994.
10	DOE 1994f	Quadrant II Draft CAS/CMS Report, DOE/OR/12-1223/D1, March 2, 1994.
11	DOE 1995a	Quadrant III Draft CAS/CMS Report, DOE/OR/12-1360/V2 & D1, April 21, 1995.
12	DOE 1995b	Quadrant IV Draft CAS/CMS Report, DOE/OR/12-1332/D1, April 14, 1995.
13	DOE 1995c	X-705 A/B CAS/CMS Report, DOE/OR/12-1239 & D2, July 29, 1995.
14	DOE 1994g	Peter Kiewit Landfill Draft CAS/CMS Report, DOE/OR/12-1295 & D2, July 29, 1994.
15	DOE 1994h	X-611A Draft CAS/CMS Report, DOE/OR/1087 & V2, July 13, 1994.
16	DOE 1995d	X-749/X-120 Groundwater Preliminary Draft Final CAS/CMS Report, DOE/OR/12-1247 & D2, September 29, 1995.
17	DOE 1993a	Report for Environmental Audit Supporting Transition, DOE/OR/1087 & V2, June 1993.
18	DOE 1995e	X-344A Risk-based Closure Plan, DOE/OR/11-1280 & D, August 1995.
19	DOE 1995f	X-231B Technology Demonstration and Closure, March 1995.
20	DOE 1992b	Closure Plan for the X-700 Tank No. 6, July 1992.
21	DOE 1992c	Closure Plan for the X-700 Tank No. 8, July 1992.
22	DOE 1994i	Baseline Ecological Risk Assessment, DOE/OR11-1316/D1, December 18, 1994.
23	DOE 1994j	Closure Plan for X-749 (Northern).
24	DOE 1994k	Closure Plan for X-749 (Southern).
25	DOE 1995g	Closure Plan for X-744Y, April 1995.

26	DOE 1992d	Closure Plan for the X-735 Landfill (Northern Portion), December 1992.
27	DOE 1995h	Final Closure/Post-Closure Plan for the X-735 Industrial Solid Waste Landfill Facility (Southern Portion), DOE/OR/12-1359 & D1, March 1995.
28	DOE 1994i	Interim Measures Plan for the Peter Kiewit Landfill at the Portsmouth Gaseous Diffusion Plant, Piketon, Ohio, DOE/OR/11-1262 & D4, August 23, 1994.
29	DOE 1994l	Consolidated Closure Plan for the X-701B Holding Pond and Sludge Containment Ponds, DOE/OR/12-1321 & D2, October 1994.
30	DOE 1989	Groundwater Quality Assessment of Four RCRA Units, May 1989.
31	DOE 1992	Closure Plan for the X-752 Hazardous Waste Storage Unit, ES/ER-28 & D2, May 1992.

particular SWMUs in 1990. For present relative risk (1995), the contaminant data came from RCRA Facility Investigation (RFI) reports and RCRA Closure Plans. For SWMUs evaluated in the RFIs, all chemicals listed as chemicals of potential concern (COPCs) in the RFIs and their associated maximum concentrations were used to determine CHF. For RCRA closure units, all chemicals detected and their associated maximum detections that were presented in RCRA Closure Plans were used to determine CHF.

SWMU CHF were determined by taking the maximum concentration of a contaminant detected at that SWMU and dividing it by the Preliminary Remediation Goal (PRG) concentration standards taken from Appendix B of the *Department of Defense's Relative Risk Site Evaluation Guidance*. These standards are basically human health PRGs based on 10^{-4} cancer risk and a hazard index = 1 for noncarcinogens. In addition, these standards were developed assuming a residential land use scenario. PORTS is currently an industrial site, and this land use is planned to continue into the foreseeable future. Therefore, the calculation of CHF scores using residential standards is overly conservative for PORTS; however, these standards were used to maintain consistency with other sites being scored using this process. Standards were not available for technetium; therefore, a PORTS site specific PRG of 650 pCi/g was used for the soil standard and a proposed MCL of 3270 pCi/L was used for the groundwater standard.

Total metals groundwater data were used for 1995 CHF evaluation because dissolved data were not available consistently. Use of dissolved metals data are preferred for the CHF calculation. In addition, the standards used to calculate CHF are based on risks from exposure to dissolved metals. Use of total metals concentration probably inflated groundwater CHF scores in the 1995 evaluation.

4.2.2 Migration Pathway Factor Scores

Migration pathway factor (MPF) scores for groundwater were based on what was currently known about the ability of identified plumes to migrate to a point of exposure. Plumes that were known to be migrating received scores of "evident." Plumes believed to be contained by geology or engineered controls received scores of "confined." All other plumes received scores of "potential." The greatest sources of uncertainty in this scoring procedure concerns plumes thought to be "confined," but where data gaps in knowledge of the geology and plume extent could conceal migration pathways.

In general, MPF scores of "potential" were given to surface soil, surface water, and sediment contamination because in most cases there was not any evidence the contamination was migrating, but the potential for migration does exist.

4.2.3 Receptor Factor Scores

Receptor factor (RF) scores for groundwater were strongly influenced by the classifications applied to the two groundwater bearing units. Classification were applied to the water bearing units according to EPA's *Guidance for Groundwater Classification Under the EPA Groundwater Protection Strategy*, Office of Groundwater Protection, 1986. The Gallia was considered a Class III aquifer which required the RF to be scored as "limited." This resulted in no Gallia contamination receiving a relative risk score of "high." The Berea was considered a Class II aquifer which required the RF to be scored as "potential." This score in conjunction with totals metals and background issues discussed above, resulted in some SWMUs with high total metals in Berea groundwater, but no organic contaminants, receiving relative risk scores of "high." This score may be erroneous because the absence of organic contamination suggests that the Berea is not contaminated.

A RF score of "potential" was used for on-site workers for exposures to surface soil, surface water, and sediment; however, a case could be made for a score of "identified" because workers currently have access to many SWMUs, but most of these are not regular work areas. For public RF scores, "limited" was used for SWMUs inside the perimeter road, while "potential" was used for SWMUs outside the perimeter road. These scores were applied because past and current land use and security measures prevent public access to most areas within perimeter road; however, areas outside the perimeter road could potentially be accessed by the public.

4.2.4 Site Specific Groundwater Considerations

The major potential threat to the health and safety of the public and plant workers, as well as the environment, at PORTS is the flow of groundwater contaminated with volatile organic compounds (VOCs), such as trichloroethylene (TCE), into streams that flow from the reservation. Since 1990, the five major VOC-contaminated groundwater plumes (5-unit, 7-unit, X-701B, X-120, and the X-749 plumes) have been contained within the PORTS reservation by favorable hydrogeology and installation of recovery wells, trenches, and sumps. As a result, the potential health and safety threat has been significantly reduced.

Groundwater wells located to the east of PORTS are a less likely potential threat. Three known private wells, located within 1,000 feet southeast of the Portsmouth reservation, obtain water from the Berea Sandstone. Impermeable Sunbury Shale underlies the eastern two thirds of the river valley where the five major plumes are located. The Berea Sandstone underlies the remainder of the reservation where a few minor sources of contaminants that could impact groundwater in the Berea exist. However, because the Berea dips at 4 degrees to the east, the regional groundwater flow has a limited potential to carry contaminants. Therefore, the three wells located within 1,000 feet southeast of PORTS are not threatened by the spread of contamination from the Portsmouth reservation.

It should also be noted that PORTS currently has a private drinking water supply that does not originate from on-site groundwater. The existence of this water supply and the application of institutional controls make the possibility of the installation of on-site groundwater wells to supply drinking water unlikely.

The predominant pathway for the migration of contaminants is the Gallia sand and gravel because most of the PORTS reservation is underlain by impermeable shale. The contaminant plumes flow laterally to local streams that flow over this shale. Thus, the base flow of the streams comes from groundwater flowing above the bedrock surface. This pathway is in the Class III A aquifer and the potential environmental threat is to surface water in the streams, rather than to the groundwater aquifer.

5.0 ENVIRONMENTAL RESTORATION STRATEGY

This chapter reiterates and summarizes the major goals of the ER program, describes key assumptions for implementing remediation, and explains the strategy for attaining these goals in an effective, efficient manner. It includes the strategy for remedy selection and performance, both within the context of regulatory and non-regulatory activities.

PORTS ER Program strategies are part of the DOE Oak Ridge Operations Five Site Complex Vision 2010 Program. Under this program, the Vision is of an integrated science, technology, education, and manufacturing complex operated in partnership with the private sector and supporting regional and national economic success.

The PORTS site will be a privatized uranium enrichment facility with unleased portions of the site reindustrialized and in use by private industry and non-DOE government agencies under the Vision 2010 Program. The scope of the Vision 2010 Program includes the following ER Program objectives:

- Ensure the risk to the public on-site workers and environment are maintained at an acceptable level by controlling current and potential future sources of contamination.
 - Groundwater will be remediated to a level appropriate for its intended use.
 - Surface water quality standards for intended use will be achieved by cost effective and technically achievable remediation of sources of contamination.
 - Soil contamination will be remediated to a level that onsite workers, at reindustrialized sites, can gain access without special worker protection or training.
- Practice good environmental and fiscal stewardship based on risk management, cost-effectiveness, and technical practicability.
- Control and remediation of legacy hazards in order to reduce the federal footprint by promoting privatization and reindustrialization:
 - Building demolition will be consistent with clean-up objectives.
 - Buildings suitable for potential reuse will be decontaminated consistent with their intended use.
- Reduce the cost of long-term institutional controls for controlled sites.

The observational approach, Data Quality Objectives (DQO), and Streamlined Approach for Environmental Restoration (SAFER) will be utilized where practical for all remediation action projects.

Only those contaminated sites and facilities currently in the ER Program are considered.

The contaminated sites and facilities requiring action to meet the program objectives are represented by the projects in the Vision. All other contaminated sites and facilities will require no further action.

RCRA is the primary regulatory process for Portsmouth contaminated sites and facilities.

Wherever feasible, contaminated media, facility equipment, and construction debris will be managed in-place (e.g., in situ vitrification, entombment in below grade structures, etc.), where appropriate. Long term institutional control is acceptable; however, the cost should be minimized.

Under the Vision, the following objectives apply:

- Ensure compliance with current regulations.
- Remediation at PORTS will be completed by the end of FY 2000.
- By FY 2007, all legacy mixed waste will be treated/disposed, with only LLW & PCB waste to be treated/disposed of by 2010. Currently, the approved Site Treatment Plan (STP) schedules reflect this activity to be completed by 2010. The STP will be revised to reflect the new schedule.

5.1 KEY ASSUMPTIONS

The key assumptions for accomplishing the PORTS ER activities under the Vision 2010 Program include the following:

5.1.1 Scope:

PORTS will be operational for an extended period following completions of site remediation.

For risk calculations, the residential and recreational receptor will be located at the worst case DOE property boundary.

Ecological habitats offsite will be maintained in strict compliance with the regulations. Onsite ecological habitats will be evaluated by the ALARA process.

Major sources of onsite contamination will be controlled. The emphasis will be on sources that have a future potential to affect offsite residents, the ecology, or onsite workers under an industrial scenario. In general the site will be industrial. However, ALARA will be used to determine clean-up levels.

Waste will be treated in accordance with the Site Treatment Plan. Legacy waste will be that which is generated prior to September 30, 1996. After that, the generator assumes responsibility for TS&D.

PCB and Scrap Metal TS&D are not included in the current Vision. They are outside the current baseline.

5.1.2 Basis of Cost Estimate:

Long term S&M Operations costs only after 2000.

By FY 2002, legacy waste storage costs will be decreased by over 50% and continue to decrease as waste is treated and disposed.

There will be no changes in the D&D projects list. Two projects exist on the D&D list: the X-705 incinerator and the X-615 Sewage Treatment Plant.

A Site becomes an “industrial” site per RCRA cleanup standards:

- No cleanup of “metals”
- No cleanup of “PAHs”
- Radiological contaminants will be remediated to 35pCi/g in soils, or ALARA cleanup levels

5.1.3 Schedule:

Decision documents approved and in place by 1998. Major remediation completed by end of FY 2000.

Groundwater program continues until FY 2000 under conventional pump and treat operations. After FY 2000, all but two pump and treat operations will be converted to passive treatment.

5.2 SITE-WIDE ENVIRONMENTAL RESTORATION STRATEGY

There are a number of major strategies that the PORTS ER Program is using to attain cleanup goals. These broad strategies include:

- Quadrant and SWMU strategy for characterization and remediation;
- A Removal Action strategy to reduce risk;
- A strategy for integrating pollution prevention and waste minimization into environmental restoration program; and,
- A strategy for long-term surveillance and maintenance.

Key actions needed to implement the overall ER strategy will include construction of an on-site Low Level Storage and Disposal facility (complete); shipment off-site as much material for treatment and disposal; and maintaining future federal control and implementing institutional controls. Implement an aggressive re-cycling and re-use program to reduce inventories of stored waste.

5.2.1 QUADRANT AND SWMU

PORTS is divided into four cleanup areas called quadrants based on groundwater flow direction. The ER Program at PORTS is mature and proceeding into the Corrective Measures Implementation (CMI) phase of the RCRA Corrective Action Process. The tactics for completing remediation of the PORTS for each Quadrant will be as follows:

- Removal of well defined sources of contamination;
- Consolidation and integration of remedial actions, corrective measures and RCRA closures for SWMUs and SWMUs groups that have common contaminant sources or interrelated groundwater contaminant plumes;
- Where practicable, use risk-based closure criteria rather than “clean” closure criteria; and
- Use results of risk analyses performed as part of the quadrant RFIs, and other risk analysis documents such as the Baseline Human Health Risk Assessment and Baseline Ecological Risk Assessment to establish cleanup levels and sequence of cleanup efforts.

5.2.2 STRATEGY FOR EXPEDITED CLEANUP

To compliment the current cleanup program, the PORTS strategy to achieve timely risk reduction includes a vigorous program of identifying contaminant releases requiring immediate attention and action. When it is determined that a contaminant release poses an immediate threat to human health and the environment, the Department has the authority to accomplish an interim remedial measure to abate, minimize, stabilize, mitigate, or eliminate the release of threat of release. There are currently 6 interim remedial measures of which all are complete (i.e., X-749 Slurry Wall).

5.2.3 STRATEGY FOR AN ACCELERATED REMEDY PROCESS

Based on risk assessment performed during the Quadrant RFIs, SWMUs determined to exhibit high risk will be grouped or singled out for early cleanup.

5.2.4 STRATEGY FOR POLLUTION PREVENTION AND WASTE MINIMIZATION

Pollution Prevention and Waste Minimization (PP&WM) are parts of the integrated strategy in the remedy selection process. As an example, a pilot plant to study and explore ways to destroy contaminants rather than transferring them to another medium such as carbon filters, has been constructed. This remedy to groundwater contamination minimizes waste. In addition, the preferred alternatives recommended to the EPA for approval includes the following statement as an action:

- PORTS will continue to examine emerging technologies, as part of the preferred remedy, to identify potential pollution prevention and waste minimization opportunities and to minimize the potential vulnerabilities of completing cleanup actions resulting from the uncertainties regarding the long-term availability of off-site disposal capacity.

Other activities at the site include emphasis on recycling and reuse all types of materials, as well as addressing (PP&WM) in project NEPA checklists. Several recycling programs have been implemented over the past several years.

5.2.5 STRATEGY FOR LONG-TERM SURVEILLANCE AND MAINTENANCE

Institutional controls, such as access restrictions (fencing) and groundwater monitoring at SWMUs and HWMUs will be implemented following restoration and closure. Groundwater monitoring at the waste storage facility was initiated before the placement of wastes to obtain background data and will continue for at least 30 years following closure of the facility. Continued federal ownership of PORTS is also a key component of the selected remedy. A review will be conducted no less often than every five years after the initiation of corrective measures in accordance with RCRA to ensure that the implemented corrective measures and remedial action, and the engineered storage facility, continue to provide adequate protection of human health and the environment. The five year reviews will continue until it is determined that the reviews are no longer needed to ensure protectiveness of human health and the environment.

5.2.6 STRATEGY FOR DECONTAMINATION AND DECOMMISSIONING

Currently two abandoned facilities, the X-705 incinerator and storage pad and the X-615 Sewage Treatment Plant, are scheduled for demolition after decontamination and decommissioning (D&D). Their structures, utilities, and equipment will be removed. All other facilities within the ER Program are being utilized.

When uranium enrichment processes are no longer needed, PORTS is assumed to be shut down and decommissioned. Under provisions in the United States Enrichment Corporation lease of the plant, stabilization and shutdown activities are the responsibility of the lessee, except for the legacy contamination. During this transition phase all polychlorinated biphenyl-containing oils, lube oils, freon, and other hazardous materials and uranium deposits will be removed from the facilities. The responsibility for removing the polychlorinated biphenyl-containing oils and other legacy contamination is assumed to be DOE's Environmental Management. Therefore the transition and stabilization phase will require close cooperation between the DOE and the lessee. During this transition phase all polychlorinated biphenyl-containing oils, lube oils, freon, and other hazardous materials and uranium deposits will be removed from the facilities.

The estimate for decommissioning and decontaminating the gaseous diffusion facilities has recently been reevaluated using several different scenarios. The scenario described in this report uses a new approach for recycling process equipment and other radioactive metals into usable products. It also includes the on-site disposal of low-level and mixed radiological waste.

For more information regarding D&D work processes, please refer to the BEMR Baseline.

5.2.7 STRATEGY FOR LONG-TERM LAND USE

The current mission of the Portsmouth plant will continue until the separation of uranium isotopes is no longer needed by the USEC of the Federal Government or private corporations. The future land use of the site will be determined at a later date, in response to this possible change of need. However, since long-term surveillance, maintenance, and institutional controls will continue indefinitely, future use will be limited. It is assumed that the site will continue to be owned by the Federal Government and used or leased for some type of industrial activity.

5.3 STRATEGY FOR CORRECTIVE MEASURE

The strategy for corrective measure selection has been and will continue to be dominated by the requirements prescribed by RCRA. As discussed in the next section, however, the PORTS corrective measure selection strategy has been to emphasize stakeholder involvement in corrective measure selection process at a level that exceeds regulatory minimum requirements. First, the Department, in conjunction with the EPA and the OEPA, identified preferred alternatives and presented them to the public in Proposed Plans for review and comment. Second, the Department reviewed the public comments and consulted with the state to determine whether the alternatives remained the most appropriate corrective action for the site. The final remedy selection decision is recorded in a Decision Document. These include the summaries comprising stakeholder input and the Department explanation of how this input was incorporated in the decision process. Selected corrective measures were made based upon: (1) overall protectiveness of human health and the environment and compliance with Applicable or Relevant and Appropriate Requirements (ARARs), (2) long-term effectiveness and permanence; reduction of toxicity, mobility, or volume through treatment; short-term effectiveness; implementability; and cost; and (3) state and community acceptance.

5.4 STRATEGY FOR STAKEHOLDER INVOLVEMENT

PORTS has encouraged stakeholder involvement to provide input in the decision-making process on the Environmental Management Program. The existing stakeholder involvement mechanisms, such as conducting public meetings and workshop sessions, disseminating informational materials and providing documents for public review and comment, will continue to be utilized in efforts to obtain public participation.

As a strategy for stakeholder involvement in the MAP, a Portsmouth Stakeholders Group workshop will be scheduled to provide an overview of the MAP and obtain public input into the planning process. The stakeholders group consists of 45 individuals representing various segments of the public within the surrounding four counties. Included are elected officials, community leaders, environmentalists, educators, health officials, natural resource and economic development representatives, state and federal regulators, plant neighbors and other interested citizens, and members of the local media.

In addition, the MAP will be made available for public review and comment in the DOE Environmental Information Center, located at 505 West Emmitt Avenue, Waverly, Ohio. A public notice of its availability will be submitted to the local newspaper and distributed to the PORTS community relations mailing list.

5.5 RESTORATION-RELATED COMPLIANCE STRATEGY

The Consent Agreements executed by the Department, State of Ohio, and EPA in 1989, laid out the Quadrants, identified SWMUs, established corrective action schedules, and directed which interim remedial measures were to be initially taken at PORTS. Currently, with the near completion of the corrective measure studies phase, corrective measure implementation work plans written to meet the obligations defined are being developed and submitted for approval. Approval of the work plans will establish the next set of milestones for the site. The PORTS site is initiating efforts to ensure expeditious regulatory approval.

With use of the decision team concept described earlier, the ability to meet the regulatory agreement milestones is expected to continue. One action that continues to keep the team focused is the preparation and issuance of a monthly status report on Consent Agreement milestones. This document is the official

data base for verifying completion of milestones in accordance with the agreed upon schedules that are contained in the Consent Agreements.

5.6 PROGRAM/PERFORMANCE MEASURES

The PORTS site will use program and performance measures as set forth in DOE documents to track overall achievement of the mission and vision of the ER Program. These measures are derived directly

5.6.1 ENVIRONMENTAL RESTORATION SUMMARY PROGRAM MEASURES

There are five summary measures which encompass the major activities and objectives of the ER Program. Through the use of these measures, the Office of Environmental Restoration can demonstrate progress to the Office of Management and Budget, Congress, and program stakeholders, while also fulfilling the requirements of the Government Performance and Results Act.

Program Measures

Program Measure 1 - The number of completed assessments/release sites/waste shipments. These measures allow PORTS to determine the number of assessments or sites completed. It is important because assessments are required to determine the extent of contamination and risk prior to beginning actual cleanup work (Figures 5.6.1.1-1 -- 5.6.1.1-3).

Program Measure 2 - The number of completed interim actions. This measure allows PORTS to determine the number of activities performed to rapidly and effectively remove immediate or potential risks and threats at DOE sites (Figure 5.6.1.1-4).

Program Measure 3 - The number of completed remedial actions. This measure allows PORTS to determine the number of completed final remedial actions thereby indicating the completion of actual physical cleanup activities and goals (Figure 5.6.1.1-5).

Program Measure 4 - The number of completed decommissionings. This measure allows PORTS to determine the number of completed final safe dismantling, and removal of contamination and structures (or release of inactive facilities for reuse) (Figure 5.6.1.1-6).

Program Measure 5 - The number of completed vicinity properties. PORTS does not have any land or structures participating in this category.

Table 5.6.1.2-1 identifies PORTS Environmental Restoration's FY 1996 performance goals and budget authority. This table not only sets performance goals for the fiscal year, but also communicates the resources needed to meet the established goals. This approach is a first step in relating performance measures to the budget.

Table 5.6.1.2-1

FY 1996 Performance Goals and Budget Authority (\$ in thousands)				
Summary Program Measure	FY 1996 Portsmouth Budget*	Performance Goals		
		FY 1996 Number to Complete	Cumulative Number Completed **	To Be Completed
Assessments	4739	5	18	12
Interim Actions	1120	1	6	NA
Remedial Actions	5816	3	20	8
Decommissionings	1954	1	1	1
Vicinity Properties	0	NA	NA	NA
Subtotal	13629	NA	NA	NA
* Total PORTS Budget	58155	NA	NA	NA

*Balance made up in: Waste Management - 31,161
Core Program - 13,365 (includes Groundwater(Pump & Treat),
Program Management, and Long Term Surveillance
**Through 9/30/96

5.6.1.3 Schedule FY 1996 Program Goals

Figure 5.6.1.3-1 provides the time frames for FY 1996 in which the above program goals will be completed.

5.6.2 STRATEGIC MEASURE 1. RELATIVE RISK REDUCTION

The measures discussed here are strategic measures for examining macro-level, long-term trends. The strategic measures are part of a larger body of performance measures that are used for shorter-term management and external reporting purposes.

The PORTS site will classify and track all release sites and facilities by relative risk to human health, the environment, and worker safety. Relative risk categories will be based on a simple, high, medium, and low classification scheme. As program priorities are implemented and program goals are attained, there is an expectation that higher relative risk release sites and facilities will either move to a lower risk classification or into the “no further action/completion” category. Similarly, the general trend of medium and low relative risk sites should be toward the no further action category (see Figures 5.6.2-1 and 5.6.2-2).

Strategic Measure 2. Lands and Facilities Status

The PORTS site team and stakeholders will develop trend in both land and facilities status with regard to the cleanup of lands and decommissioning of facilities so that they are ready to be transferred for future beneficial use. Figures 5.6.2-3 and 5.6.2-4 depict the performance trends from which actuals may be plotted against.

Strategic Measure 3. Resource Distributio

The PORTS site will track overall trending in the distribution of funds committed to core activities, assessment activities (including determination of no further action), and cleanup progress. The desired trend would show a steady decline in the assessment and core activities fraction, and a corresponding increase in the cleanup progress fraction (Figure 5.6.2-5).

Strategic Measure 4. Program Efficiency

Cost-effectiveness and efficiency will be achieved through reductions in infrastructure costs, elimination of unnecessary management and oversight costs, and utilization of cost effective technologies. Indicators such as infrastructure costs and program management costs will be used as a proxy measuring effectiveness and efficiency trends. The PORTS Site is working, in conjunction with other DOE offices, to develop methods for measuring program cost-effectiveness and efficiency. These measures will be used to quantify program performance (Figures 5.6.2-6 -- 5.6.2-8).

6.0 ENVIRONMENTAL RESTORATION PROGRAM VISION 2010 COMPLIANCE SCHEDULE

This section presents the Lockheed Martin Energy Systems (LMES) Portsmouth Vision 2010 Compliance Schedule, which is the LMES Configuration Control Team's best current estimate of anticipated activities in support of Portsmouth Remediation Goals shown in Table 6.0-1. The Compliance Schedule remediates the site consistent with the Portsmouth Vision 2010 Program beginning in Fiscal Year 1996 of the Program. Refinement and optimization of the Compliance Schedule will remain as an ongoing Configuration Control Team action item to achieve the best distribution of resources and effectiveness of actions.

Table 6.0-1 Portsmouth Remediation Goals

PORTSMOUTH GOAL	TARGET YEAR
Site Assessments Completed	1995
All Groundwater Plumes Contained	1995
All AST/UST Remediation Completed	1995
RCRA Closures and Solid Waste Closures Completed	1996
Receive the First Decision Document	1996
First Groundwater Passive Treatment System Operational	1996
All Site Drainage Sediment Remediated	1998
Quadrant III Corrective Measures Implemented	1998
All Pump and Treat Converted to Passive Treatment	1999
Quadrant I Corrective Measures Implemented	2000
Quadrant II Corrective Measures Implemented	2000
Quadrant IV Corrective Measures Implemented	2000
Treat and Dispose all Mixed Waste	2007

6.1 COMPLIANCE SCHEDULES AND MILESTONES

The compliance summary schedule milestones for Portsmouth is presented in Table 6.1-1. These milestones are based on requirements outlined in the Portsmouth Vision 2010 Program.

Table 6.1-1 Portsmouth Vision 2010 Compliance Summary Schedule Milestones

ACTIVITY	TASK	COMPLETION DATE (FISCAL YEAR)
ADS 6301 Quadrant I	Final Decision Document Signed by EPA Remedial Action Starts Remedial Action Ends	200019972000
ADS 6302 Quadrant II	Final Decision Document Signed by EPA Remedial Action Starts Remedial Action Ends	200019962000
ADS 6303 Quadrant III	Final Decision Document Signed by EPA Remedial Action Starts Remedial Action Ends	199819971998
ADS 6304 Quadrant IV	Final Decision Document Signed by EPA Remedial Action Starts Remedial Action Ends	199819962000
ADS 6306 Groundwater Protection Program	Remedial Action Starts Remedial Action Ends	19952000
ADS 6501 Program Management	Program Mgmt Initiated Program Mgmt Completed	19952014
ADS 6701 D & D Program	D&D Initiated D&D Completed	19951996
ADS 6801 S & M Program	S&M Initiated S&M Completed*	19952014
ADSs 6201 ,6202, & 6203 Waste Management Program	Site Treatment Plan Approved by OEPA Removal Action Ends: Legacy Mixed Wastes	19952007

* Surveillance and Monitoring of post-closure sites is considered a perpetual responsibility. For planning purposes, the S&M Program is using a twenty year fiscal projection.

7.0 TECHNICAL AND OTHER ISSUES TO BE RESOLVED

7.1 ISSUES AFFECTING THE ENVIRONMENTAL RESTORATION PROGRAM

Technical issues to be resolved at PORTS are primarily related to environmental remediation that reduces risk to the public, workers and the environment. The focus on environmental remediation is possible because environmental site evaluations were completed in Fiscal Year 1995. Additionally, all groundwater contamination plumes were contained, and all Aboveground Storage Tanks and Underground Storage Tanks remediation was completed during Fiscal Year 1995.

Risk reduction issues involve:

- Development and implementation of 1) contamination source treatment technologies, 2) DNAPL recovery technology, and 3) passive groundwater contamination plume control.
- Remediation of contaminated soil in surface drainage ditches.

Other issues to be resolved involve:

- Future land use of the PORTS reservation.
- Soil and groundwater remediation cleanup levels.
- Development and implementation of other treatment technologies.
- Long-term cost-effectiveness involving groundwater compliance monitoring, surveillance, and maintenance activities.

As PORTS has moved through the study phase to the design and remediation phases, the issues listed above have emerged and must be resolved/managed to allow the restoration process to be successfully completed. The identification of potentially critical issues or concerns specific to PORTS Environmental Restoration and Waste Management has been an important focus during the development of this document. Identification of such issues for consideration and resolution, and the periodic reviewing of these and new issues should provide opportunities to improve decisions and to implement innovative and cost effective solutions.

7.2 INITIATIVES IMPLEMENTED TO IMPROVE PROJECT PERFORMANCE

Portsmouth has implemented an aggressive program to dispose of legacy waste. In conjunction with Vision 2010, the legacy waste will be retired by FY2007.

Whenever possible, SWMU remediation has included conversion to passive treatment systems. This will reduce the long term cost of post-closure activities related to SWMUs.

Issues related to remediation of the PORTS site have the potential to impede progress and drive costs upward. As an example, the cost of remediation to clean up SWMUs at or below background levels rather than risk-based levels may require higher funding levels which will reduce the number of annual remediation projects in an era

where funding is limited. An inevitable result of this situation is a lengthening of clean up schedules and a possible reduction in the total number of remediation projects practicable. Attention has been focused on such obstacles to quickly, safely, and cost effectively complete remediation. The Portsmouth Vision 2010 Program has been structured to include these circumstances.

APPENDIX - A.
PORTSMOUTH VISION 2010 FISCAL YEAR FUNDING REQUIREMENT/COST

Table A-1. Activity Cost Baseline

Program	ADS	Project Name	Task	FY 1996 (\$000)	FY 1996 (\$000)	FY 1996 (\$000)	FY 1996 (\$000)	FY 2000 Complete (\$000)	TOTAL
High Risk									
A	6301	Quad I Assessments	Assessments	730	634	50	210	443	2,067
RA	6301	5-Unit Area	USTs		1,112				1,112
WM	6301	5-Unit Area	USTs WD		18				18
WM	6301	5-Unit Area	USTs WS		18				18
RA	6301	5-Unit Area	X-231B CMS		222	150			371
RA	6301	5-Unit Area	X-231A CMS & CMI WP		370	47			417
RA	6301	5-Unit Area	X-231A CMI		5,750	7,069			12,818
RA	6301	5-Unit Area	5-Unit GW CMS	614	166	56			836
RA	6301	X-749/X-120	X-749/120 CMS & CMI WP	50	138				188
RA	6301	X-749/X-120	X-749/X-120 CMI	1,120			2,227	2,609	5,956
A	6302	Quad II Assessments	Assessments		483	48	145	513	1,189
RA	6302	7-Unit Area	7-Unit GW CMS		219	54			273
RA	6302	7-Unit Area	7-Unit Soil CMS		331	583	301		1,216
RA	6302	7-Unit Area	X622T Removal & Upgrade X623					2,526	2,526
A	6303	Quad III Assessments	Assessments		469	383			852
A	6304	Quad IV Assessments	Assessments		620	460			1,080
Total High Risk				2,514	10,550	8,900	2,883	6,091	30,938
Medium Risk									
WM	6201	Waste Treatment	Waste Treatment	9,762	10,154	10,154	12,660	385,412	428,140
WM	6202	Waste Storage	Waste Storage	14,043	13,539	13,539	13,519	60,365	115,000
WM	6203	Waste Disposal	Waste Disposal	5,969	5,871	929	7,928	93,440	114,130
WM	6203	Waste Disposal	New Landfill	1,152	636	6,380	129		8,297
RA	6301	Peter Kiewit Landfill	PK CMS & CMI WP	150	133				283
RA	6301	Peter Kiewit Landfill	PK CMI			4,600	11,365		15,965
RA	6301	Peter Kiewit Landfill	PK Active to Passive Treatment				635		635
RA	6301	Site-Wide Surface Drainage	Waste Drainage CMS & CMI WP	700	398				1,098
RA	6301	Site-Wide Surface Drainage	Waste Drainage CMI		2,131				2,131
RA	6301	Site-Wide Surface Drainage	Site-Wide Drain. CMS & CMI WP		729	311			1,040
RA	6301	Site-Wide Surface Drainage	Site-Wide Drainage CMI			1,888			1,888
RA	6302	X-705A/B Area	X-705A/B CMS & CMI WP	50					50
RA	6302	X-705A/B Area	X-705A/B CMI	1,485					1,485
RA	6302	X701B Area	X701B Source CMS & CMI WP	130	219	49			398
RA	6302	X701B Area	X701B GW CMS & CMI WP	2,000	63	155			2,219
RA	6302	X701B Area	X701B GW CMI					3,901	3,901
RA	6302	X701B Area	X701B Source CMI					1,941	1,941
RA	6302	X701B Area	X701B IRM/624 Pass Treatment				569	108	677
RA	6302	X701B Area	X-230J7 Source CMS	165	288				453
RA	6303	X-740 Area	X-740 CMS		229	250			478
RA	6304	X-611A Area	X-611A CMS & CMI WP	150					150
RA	6304	X-611A Area	X-611A CMI	3,486					3,486
RA	6304	X-734 Area	X-734 CMS & CMI WP			331	285	120	736
RA	6304	X-734 Area	X-734 CMI			575	1,899	3,892	6,369
RA	6304	X-734 Area	X Former CMS		331	252	49		633
RA	6304	X-344A Area	X-344A						-
D&D	6701	Site-Wide D&D	X-705A/B D&D	1,954					1,954
D&D	6701	Site-Wide D&D	X-615 D&D		934				934
Total Medium Risk				41,196	35,655	39,413	49,039	549,178	714,488
Low Risk									
RA	6302	7-Unit Area	X-701C Soil CMS & CMI WP		263	314	160		737
RA	6302	7-Unit Area	X-701C CMI	845					845
RA	6302	X701B Area	X-744Y/G Soil CMS		288				288
RA	6302	X701B Area	X-744Y/G Soil CMI			100	519		619
WM	6302	X701B Area	X-744Y/G Soil CMI WD				189		189
WM	6302	X701B Area	X-744Y/G Soil WS				51		51
Total Low Risk				845	551	414	918	-	2,728
Other									
WM	6301	Site-Wide Surface Drainage	Waste Drainage WD		189				189
WM	6301	Site-Wide Surface Drainage	Waste Drainage WS		41				41
WM	6301	Site-Wide Surface Drainage	Site-Wide Drainage WD			275			275
WM	6301	Site-Wide Surface Drainage	Site-Wide Drainage WS			46			46
WM	6302	X-705A/B Area	X-705A/B CMI WD		460	500			960
WM	6303	SEP	SEP WS	235	51				286
WM	6303	SEP	SEP WT		1,214				1,214
Total Other				235	1,955	821	-	-	3,011
Core Program									
S&M	6301	5-Unit Area	X-231A S&M			33	33	495	561
S&M	6301	Peter Kiewit Landfill	PK S&M				83	1,245	1,328
S&M	6302	X-705A/B Area	X-705A/B S&M		33	33	33	495	594
S&M	6302	X701B Area	X701B Source O&M					3,145	3,145
S&M	6304	X-611A Area	X-611A S&M		67	72	72	1,080	1,291
S&M	6304	X-611A Area	X-611A O&M		47	51	51	759	907
S&M	6304	X-734 Area	X-734 S&M					759	759
S&M	6306	GW Protection Prog.	GW Treatment Systems	3,013	4,463	4,372	4,372	36,164	52,385
S&M	6306	GW Protection Prog.	GW Monitoring	3,012	2,362	2,362	2,362	29,398	39,496
S&M	6306	GW Protection Prog.	GW Reporting & Documentation	522	522	522	522	6,497	8,585
S&M	6306	GW Protection Prog.	GW Database Management	290	290	290	290	3,609	4,769
S&M	6306	GW Protection Prog.	GW Management	696	696	696	696	8,663	11,441
PM	6501	Program Management	Program Management	4,562	4,391	5,115	4,127	38,991	57,186
S&M	6701	Site-Wide D&D	D&D S&M	228	262	262	262	3,933	4,945
S&M	6801	Long Term S&M	Long Term S&M	1,042	906	906	906	13,594	17,350
Total Core Program				13,365	14,040	14,714	13,809	148,827	204,755
Total				58,155	62,750	64,262	66,649	704,096	955,911

Table A-1. Activity Cost Baseline

Program	AIS	Project Name	Task	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	TOTAL	
High Risk	A	6301	Quad I Assessments	Assessments	730	634	50	210	443														2,066	
	RA	6301	5-Unit Area	USIS ND		1,112																	1,111	
	WM	6301	5-Unit Area	USIS ND		18																	18	
	RA	6301	5-Unit Area	X-231B CMS		222	150																371	
	RA	6301	5-Unit Area	X-231A CMS & CMI NP		370	47																417	
	RA	6301	5-Unit Area	X-231A CMI		5,750	7,069																12,818	
	RA	6301	5-Unit Area	5-Unit GW CMS		614	56																836	
	RA	6301	X-749/X-120	X-749/X-120 CMS & CMI NP		50	138																188	
	RA	6301	X-749/X-120	X-749/X-120 CMI		1,120																	5,955	
	A	6302	Quad II Assessments	Assessments																			1,181	
	RA	6302	7-Unit Area	7-Unit GW CMS		483	48																2,227	
	RA	6302	7-Unit Area	7-Unit GW CMS		219	54																273	
	RA	6302	7-Unit Area	X622T Removal & Upgrade X623		331	583	301															1,216	
	A	6303	Quad III Assessments	Assessments	X622T Removal & Upgrade X623	469	383																852	
	A	6304	Quad IV Assessments	Assessments		620	460																1,080	
	Medium Risk			Total High Risk		2,514	10,550	8,900	2,883	6,091	-	-	-	-	-	-	-	-	-	-	-	-	-	30,933
WM		6201	Waste Treatment	Waste Treatment	9,762	10,154	10,154	12,660	18,782	25,208	39,500	39,500	42,300	45,004	32,100	32,500	31,900	31,000	19,618	7,000	7,000	7,000	428,142	
WM		6202	Waste Storage	Waste Storage	14,043	13,539	13,539	13,539	10,815	9,492	6,921	5,537	5,100	4,700	4,300	3,900	3,500	3,100	3,000				115,005	
WM		6203	Waste Disposal	Waste Disposal	5,969	5,871	929	7,928	12,107	23,044	11,932	10,963	7,090	7,304	5,000	5,000	5,000	4,000	2,000				114,137	
WM		6203	Waste Disposal	New Landfill	1,152	636	6,380	129																8,297
RA		6301	Peter Klewlt Landfill/CMI	CMI NP	150	133	4,600	11,365															283	
RA		6301	Peter Klewlt Landfill/CMI	Active to Passive Treatment																			15,965	
RA		6301	Sitewide Surface Drainage	Drainage CMS & CMI NP	700	398																	635	
RA		6301	Sitewide Surface Drainage	Drainage CMS & CMI NP		2,131	311																1,099	
RA		6301	Sitewide Surface Drainage	Drainage CMS & CMI NP		729																	2,133	
RA		6301	Sitewide Surface Drainage	Drainage CMS & CMI NP			1,888																1,888	
RA		6302	X-705A/B Area	X-705A/B CMS & CMI NP	50																		50	
RA		6302	X-705A/B Area	X-705A/B CMS & CMI NP	1,485																		1,485	
RA		6302	X-705A/B Area	X-705A/B CMS & CMI NP	130																		130	
RA		6302	X-705A/B Area	X-705A/B CMS & CMI NP	2,000																		3,901	
RA		6302	X-705A/B Area	X-705A/B CMS & CMI NP	63																		1,941	
RA		6302	X-705A/B Area	X-705A/B CMS & CMI NP	219																		3,901	
RA		6302	X-705A/B Area	X-705A/B CMS & CMI NP	49																		1,941	
RA		6302	X-705A/B Area	X-705A/B CMS & CMI NP	165																		4,533	
RA		6302	X-705A/B Area	X-705A/B CMS & CMI NP	229																		4,782	
RA	6304	X-611A Area	X-611A CMS & CMI NP	150																		1,500		
RA	6304	X-611A Area	X-611A CMS & CMI NP	3,486																		3,486		
RA	6304	X-734 Area	X-734 CMS & CMI NP	331																		736		
RA	6304	X-734 Area	X-734 CMS & CMI NP	575																		6,365		
RA	6304	X-734 Area	X-734 CMS & CMI NP	1,899																		1,899		
RA	6304	X-734 Area	X-734 CMS & CMI NP	49																		633		
RA	6304	X-344A Area	X-344A CMS & CMI NP	331																		-		
RA	6304	X-344A Area	X-344A CMS & CMI NP	1,954																		1,954		
RA	6304	X-344A Area	X-344A CMS & CMI NP	934																		934		
RA	6304	X-344A Area	X-344A CMS & CMI NP	41,196																		714,481		
Low Risk	RA	6302	7-Unit Area	X-701C SOLI CMS & CMI NP	263																		737	
	RA	6302	7-Unit Area	X-741/G SOLI CMS	845																		845	
	RA	6302	7-Unit Area	X-741/G SOLI CMS	288																		288	
	RA	6302	7-Unit Area	X-741/G SOLI CMS	100																		100	
	RA	6302	7-Unit Area	X-741/G SOLI CMS	519																		519	
	RA	6302	7-Unit Area	X-741/G SOLI CMS	189																		189	
	RA	6302	7-Unit Area	X-741/G SOLI CMS	51																		51	
	Other		Total Low Risk		845	551	414	918	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,728	
	WM	6301	Sitewide Surface Drainage	Drainage ND		189																	189	
	WM	6301	Sitewide Surface Drainage	Drainage ND		41																	41	
	WM	6301	Sitewide Surface Drainage	Drainage ND		275																	275	
	WM	6301	Sitewide Surface Drainage	Drainage ND		46																	46	
	WM	6302	Sitewide Surface Drainage	Drainage ND		500																	960	
	WM	6302	Sitewide Surface Drainage	Drainage ND		235																	286	
	WM	6303	SEP	SEP WS	235																		286	
	WM	6303	SEP	SEP WS	51																		1,214	
WM	6303	SEP	SEP WS	1,214																		1,214		
WM	6303	SEP	SEP WS	235																		286		
WM	6303	SEP	SEP WS	51																		1,214		
WM	6303	SEP	SEP WS	1,214																		1,214		
WM	6303	SEP	SEP WS	235																		286		
WM	6303	SEP	SEP WS	51																		1,214		
WM	6303	SEP	SEP WS	1,214																		1,214		
Core Program	S&M	6301	5-Unit Area	X-231A S&M		33																	561	
	S&M	6301	Peter Klewlt Landfill/CMI	S&M		33																	1,328	
	S&M	6302	X-705A/B Area	X-705A/B S&M		33																	594	
	S&M	6302	X-705A/B Area	X-705A/B S&M		33																	594	
	S&M	6304	X-611A Area	X-611A S&M		33																	3,145	
	S&M	6304	X-611A Area	X-611A S&M		33																	3,145	
	S&M	6304	X-611A Area	X-611A S&M		33																	3,145	
	S&M	6304	X-611A Area	X-611A S&M		33																	3,145	
	S&M	6304	X-611A Area	X-611A S&M		33																	3,145	
	S&M	6304	X-611A Area	X-611A S&M		33																		

APPENDIX - B.
ENVIRONMENTAL RESTORATION DELIVERABLES

ID	DS	TARCS	TARCF	C2	ESDATE	EFD	ACTF	ACTS	MS_NUM	TEMP	RESP
P60102P50B	DEACTIVATE REACTIVE METALS-INITIATE CONSTRUCTION FOR VENDOR OPS		3/31/97	8.6.01.02		3/31/97	3/31/97		1		
P60102Q1C	HEUW-SUBMITTAL OF PLAN TO ADDRESS TREATMENT OF HEU MIXED WASTES		12/31/98	8.6.01.02		12/31/98	2/31/98		1		
P60102P216	ARB REGEN - INITIATE CONSTRUCTION NECESSRAY FOR VENDOR OPS	9/30/00		8.6.01.02		9/30/00	9/30/00		1		
P60102P81B	UTURE INCIN-SUBMITTAL OF PLAN FOR TREATMENT OF WASTE STREAM		9/30/00	8.6.01.02		9/30/00	9/30/00		1		
P60102P11S	TABILIZATION-INITIATE CONSTRUCTION NECESSARY FOR VENDOR OPS	3/31/01		8.6.01.02		3/31/01	3/31/01		1		
P60102Q31M	METAL RECOVERY-SUBMITTAL OF PLAN FOR TREATMENT OF MIX WASTES		9/30/00	8.6.01.02		9/30/01	9/30/01		1		
P60102Q41P	PHYS CHEM TRET-SUBMITTAL OF PLAN FOR TREAT OF MIX WASTES		9/30/00	8.6.01.02		9/30/01	9/30/01		1		
P60102203D	DR FPCA - SUBMIT FINAL SITE TREATMENT PLAN TO DOE	2/15/95		8.6.01.02		4/3/95	4/3/95	4/3/95	4/3/95		
31A07242 Q1	Quadwide CMS Final Report Approval (ROD)			8.1.01.50.04.08		8/17/08	8/17/08		1		
32B07380 Q2	Quadwide CMS Final Report Approval (ROD)			8.1.02.50.04.08		8/17/05	8/17/05		1		
33C07277 Q3	Quadwide CMS Final Report Approval (ROD)			8.1.03.50.04.08		1/22/05	1/22/05		1		
34D07370 Q4	Quadwide Final CMS Report Approval (ROD)			8.1.04.50.04.08		11/23/10	1/23/10		1		
M20154001D	& D Initiation - X-615	10/1/00		8.2.01.54.20		10/1/00	10/1/00		1		
M20154005D	& D Close-Out - X-615			8.2.01.54.20		10/16/02	10/16/02		1		
P601011A5S	SHIP LIQUID WASTE TO K-25 INCINERATOR PER BURN PLAN		9/30/97	8.6.01.01		9/30/97	9/30/97		2A		
P601011B5S	SHIP LIQUID WASTE TO K-25 INCINERATOR PER BURN PLAN		9/30/98	8.6.01.01		9/30/98	9/30/98		2A		
P601011C5S	SHIP LIQUID WASTE TO K-25 INCINERATOR PER BURN PLAN		9/30/99	8.6.01.01		9/30/99	9/30/99		2A		
P601011D5S	SHIP LIQUID WASTE TO K-25 INCINERATOR PER BURN PLAN		9/30/00	8.6.01.01		9/30/00	9/30/00		2A		
P601011E9S	SHIP LIQUID WASTE TO K-25 INCINERATOR PER BURN PLAN	9/30/01	9/30/00	8.6.01.01		9/30/01	9/30/01		2A		
P601011F9S	SHIP LIQUID WASTE TO K-25 INCINERATOR PER BURN PLAN		9/30/02	8.6.01.01		9/30/02	9/30/02		2A		
P60102P31Q	YANIDE DESTR'N - INITIATE SHIPMENT OF WASTES FOR TREAT AT Y-12		9/30/98	8.6.01.02		9/30/98	9/30/98		2A		
P60102P41M	MERCURY PROCESSING - INITIATE PREPARATION OF WASTES FOR SHIPMENT		12/31/97	8.6.01.02		12/31/97	12/31/97		2A		
P60102P706	URNT O-S TSCA INCIN-COMPLETE SHIPEMENT OF LIQ MW INVENTORY		9/30/99	8.6.01.02		9/30/99	9/30/99		2A		
P60102P41M	MERC.PROC.-COMPLETE SHIPMENT OF WASTE STREAM FOR OFFSITE TREATMEN		12/31/98	8.6.01.02		12/31/98	12/31/98		2A		
P60102Q2C	GW AQUEOUS TREATMENT - COMP PROCESSING OF WASTE STREAM		12/31/99	8.6.01.02		12/31/99	12/31/99		2A		
P60102P610	AB PACK TREAT - INITIATE SHIPMENT OF WASTES FOR TREATMENT		6/30/00	8.6.01.02		6/30/00	6/30/00		2A		
P60102P316	YANIDE DESTR-COMPLETE SHIP OF WASTE STREAM FOR OFFSITE TREATMENT		12/31/00	8.6.01.02		12/31/00	12/31/00		2A		
P60102P615	AB PACK - COMPLETE SHIPMENT OF THE PORTS MIX WST INVENTORY		9/30/00	8.6.01.02		9/30/01	9/30/01		2A		
P601011108	SHIP 172,000 LBS. LIQUID WASTE TO K-25 INCINERATOR		9/30/95	8.6.01.01		9/30/95	9/30/95	9/30/95	9/30/95		2A
P60102204B	EAVY METAL SLUDGE TREATMENT - SHIP 150,000 LBS FOR TREATMENT		9/30/96	8.6.01.02		9/30/96	9/30/96		2A		
P601011118	SHIP LIQUID WASTE TO K-25 INCINERATOR 100,000 POUNDS		9/30/96	8.6.01.01		9/30/96	9/30/96		2A		
P601059000	COMPLETE SHIPMENT OF INVENTORY OF FLUORESCENT BULBS FOR RECYCLE		9/30/96	8.6.01.05		9/30/96	9/30/96		2A		
P60102209B	HIGHLY ENRICHED URANIUM WASTE - COMPLETE CHARACTERIZATION OF 6 WA		9/30/96	8.6.01.02		9/30/96	9/30/96		2A		
P602026100	CONTAINERIZED SLUDGE REPACKAGING - INITIATE SCOPING	1/1/95		8.6.02.02		1/1/95	1/1/95	1/1/95	1/1/95		2A
P60305P118	SHIP 2 MILLION LBS. RCRA/RAD WASTE TO ENVIROCARE		9/30/96	8.6.03.05		9/30/96	9/30/96		2A		
P60305P21S	SHIP 2 MILLION LBS. RCRA/RAD WASTE TO ENVIROCARE		9/30/97	8.6.03.05		9/30/97	9/30/97		2A		
P60305Q1C	SHIP LLW TO HANFORD - BALANCE OF LOT 1/2 DRUMS		9/30/97	8.6.03.06		9/30/97	9/30/97		2A		
P60305Q2C	SHIP 480,000 LBS. - B25 BOXES - LLW TO HANFORD		9/30/98	8.6.03.06		9/30/98	9/30/98		2A		
P60305Q3C	SHIP 1 MILLION LBS. LLW TO HANFORD		9/30/99	8.6.03.06		9/30/99	9/30/99		2A		
P60305Q4C	SHIP 2 MILLION LBS. LLW TO HANFORD		9/30/00	8.6.03.06		9/30/00	9/30/00		2A		
P60305Q5C	SHIP 2 MILLION LBS. LLW TO HANFORD		9/30/00	8.6.03.06		9/30/01	9/30/01		2A		
P60301P01S	SOLID WASTE LANDFILL - INITIATE DESIGN	11/1/94		8.6.03.01		11/1/94	11/1/94	11/1/94	11/1/94		2A
P60305P20S	SHIP 500,000 LBS OF WASTE TO ENVIROCARE		9/30/99	8.6.03.05		9/9/95	9/9/95	9/9/95	9/9/95		2A
P60305P21S	SHIP BALANCE OF 701-B SOILS RCRA/RAD WASTE TO ENVIROCARE		9/30/98	8.6.03.05		9/30/98	9/30/98		2A		
P60306P10S	SHIP 500,000 LBS OF LOW LEVEL WASTE (LLW) TO HANFORD			8.6.03.06		6/20/95	6/20/95	6/20/95	6/20/95		2A
P60306P20S	SHIP 480,000 LBS. LLW TO HANFORD		9/30/96	8.6.03.06		9/30/96	9/30/96		2A		
31A50145 Q1	Submit Phase II Draft RFI Rpt to Agencies		6/20/99	1.01.50.02.08		6/20/94	6/20/94	6/20/94	6/20/94		2A
31A50174 Q1	Submit Quadwide Final RFI Report to Agencies			8.1.01.50.02.08		9/29/96	9/29/96		2A		
31A07120 Q1	Submit Quadwide Draft CMS Report to Agencies			8.1.01.50.04.08		5/11/94	5/11/94	5/11/94	5/11/94		2A
31A07225 Q1	Submit Quadwide Final CMS Rpt to Agencies			8.1.01.50.04.08		7/18/08	7/18/08		2A		
31A07320 Q1	Submit Quadwide Draft CMI Work Plan to Agencies			8.1.01.50.04.12		10/1/08	10/1/08		2A		
31A07370 Q1	Submit Quadwide Final CMI Work Plan to Agencies			8.1.01.50.04.12		1/29/09	1/29/09		2A		
31A49060	Submit Final Air RFI Work Plan to Agencies			8.1.01.50.08.06		10/8/93	10/8/93	10/8/93	2A		
31A49262	Submit Air RFI Draft Report to Agencies			8.1.01.50.08.08		2/28/95	2/28/95	2/28/95	2/28/95		2A
31A48130	Submit Draft ULB BRC Watersheds Rpt to Agencies		7/7/98	1.01.50.10.08		7/7/94	7/7/94	7/7/94	7/7/94		2A
31A48240	Submit Sitewide Draft BERA Draft Report to Agencies			8.1.01.50.10.08		12/6/94	12/6/94	12/6/94	12/6/94		2A
31A11055	Submit Sitewide Draft Human Health Report to Agencies			8.1.01.50.12.08		12/19/95	12/19/95		2A		
31A47120	Submit Draft Background Sampling Investigation Rpt to Agencies			8.1.01.50.14.08		11/4/94	11/4/94	11/4/94	11/4/94		2A
31A40220 Q1	Submit Sitewide Draft CMI Work Plan to Agencies			8.1.01.50.18.12		12/26/10	12/26/16		2A		
31A40270 Q1	Submit Sitewide Final CMI Work Plan to Agencies			8.1.01.50.18.12		4/25/17	4/25/17		2A		
31A40490 Q1	Submit Sitewide Final CMS Report to Agencies			8.1.01.50.18.08		10/12/10	10/12/16		2A		
31A40412 Q1	Submit Sitewide Draft CMS Rpt to Agencies			8.1.01.50.18.08		7/21/15	7/21/15		2A		
31A58220 Q1	Submit West Drainage Ditch Draft CMI Work Plan to Agencies			8.1.01.52.02.10		5/24/97	5/24/97		2A		
31A58270 Q1	Submit West Drainage Ditch Final CMI Work Plan to Agencies			8.1.01.52.02.10		9/21/97	9/21/97		2A		
31A58455 Q1	Submit West Drainage Ditch Draft CMS Report to Agencies			8.1.01.52.02.22		8/17/96	8/17/96		2A		
31A58490 Q1	Submit West Drainage Ditch Final CMS Report to Agencies			8.1.01.52.02.22		3/10/97	3/10/97		2A		
31A53445 Q1	Start West Drainage Ditch Remedial Action			8.1.01.52.04.26		6/23/99	6/23/99		2A		
31A53455 Q1	West Drainage Ditch Remedial Action Complete			8.1.01.52.04.26		2/11/01	2/11/01		2A		
31A52220 Q1	Submit Sitewide Surface Drainage Draft CMI WP to Agencies			8.1.01.52.06.10		3/8/98	3/8/98		2A		
31A52270 Q1	Submit Sitewide Surface Drainage Final CMI WP to Agencies			8.1.01.52.06.10		7/6/98	7/6/98		2A		
31A52455 Q1	Submit Sitewide Surface Drainage Draft CMS Rpt to Agencies			8.1.01.52.06.22		4/17/97	4/17/97		2A		
31A52490 Q1	Submit Sitewide Surface Drainage Final CMS Report to Agencies			8.1.01.52.06.22		12/23/97	12/23/97		2A		
31A55005 Q1	Submit X-749/120 Draft CMS Rpt to Agencies			8.1.01.54.02.22		6/2/94	6/2/94	6/2/94	6/2/94		2A
31A55095 Q1	Submit X-749/120 Final CMS Report to Agencies			8.1.01.54.02.22		4/1/97	4/1/97		2A		
31A55250 Q1	Submit X-749/120 Draft CMI Work Plan to Agencies			8.1.01.54.02.10		6/1/97	6/1/97		2A		
31A55305 Q1	Submit X-749/120 Final CMI Work Plan to Agencies			8.1.01.54.02.10		8/15/97	8/15/97		2A		
31A51490 Q1	Start X-749/120 Remedial Action			8.1.01.54.04.26.01		11/10/97	11/10/97		2A		
31A51505 Q1	X-749/120 Remedial Action Complete			8.1.01.54.04.26.01		10/30/99	10/30/99		2A		
31A57220 Q1	Submit X-231A Draft CMI Work Plan to Agencies			8.1.01.56.02.10		4/18/98	4/18/98		2A		
31A57270 Q1	Submit X-231A Final CMI Work Plan to Agencies			8.1.01.56.02.10		7/2/98	7/2/98		2A		
31A57405 Q1	Submit X-231A Draft CMS Report to Agencies			8.1.01.56.02.22		4/12/97	4/12/97		2A		
31A57490 Q1	Submit X-231A Final CMS Report to Agencies			8.1.01.56.02.22		2/2/98	2/2/98		2A		
31A24445 Q1	Start X-231A Soil Remedial Action			8.1.01.56.04.26.01		11/5/00	11/5/00		2A		
31A24455 Q1	X-231A Soil Remedial Action Complete			8.1.01.56.04.26.01		7/7/01	7/7/01		2A		
31A21220 Q1	Submit X-231B Draft CMI Work Plan to Agencies			8.1.01.56.06.10		3/17/98	3/17/98		2A		
31A21270 Q1	Submit X-231B Final CMI Work Plan to Agencies			8.1.01.56.06.10		6/15/98	6/15/98		2A		
31A21405 Q1	Submit X-231B Draft CMS Report to Agencies			8.1.01.56.06.22		1/29/97	1/29/97		2A		
31A21490 Q1	Submit X-231B Final CMS Report to Agencies			8.1.01.56.06.22		1/1/98	1/1/98		2A		
31A22445 Q1	Start X-231B Soil Remedial Action			8.1.01.56.08.26.01		8/2/01	8/2/01		2A		
31A22455 Q1	X-231B Soil Remedial Action Complete			8.1.01.56.08.26.01		4/3/02	4/3/02		2A		
31A56220 Q1	Submit 5-Unit Groundwater Draft CMI WP to Agencies			8.1.01.56.10.10		1/20/98	1/20/98		2A		
31A56270 Q1	Submit 5-Unit Groundwater Final CMI WP to Agencies			8.1.01.56.10.10		5/20/98	5/20/98		2A		
31A56405 Q1	Submit 5-Unit Groundwater Draft CMS Report to Agencies			8.1.01.56.10.22		9/28/96	9/28/96		2A		
31A56490 Q1	Submit 5-Unit Groundwater Final CMS Report to Agencies			8.1.01.56.10.22		10/7/97	10/7/97		2A		
31A59445 Q1	Start 5-Unit Groundwater Remedial Action			8.1.01.56.12.26.01		7/13/01	7/13/01		2A		
31A59455 Q1	5-Unit Groundwater Remedial Action Complete			8.1.01.56.12.26.01		3/14/02	3/14/02		2A		
31A12405 Q1	Submit PKLF Draft CMS Rpt Agencies			8.1.01.58.02.22		7/29/94	7/29/94	7/29/94	7/29/94		2A
31A12220 Q1	Submit PKLF Draft CMI Work Plan to Agencies			8.1.01.58.02.10		5/23/96	5/23/96		2A		
31A12270 Q1	Submit PKLF Final CMI Work Plan to Agencies			8.1.01.58.02.10		9/20/96	9/20/96		2A		
31A12487 Q1	Submit PKLF Final CMS Report to Agencies			8.1.01.58.02.22		8/8/95	8/8/95	8/8/95	8/8/95		2A
31A46445 Q1	Start Peter Kiewit Landfill Remedial Action			8.1.01.58.04.26.01		7/13/01	7/13/01		2A		
31A46455 Q1	Peter Kiewit Landfill Remedial Action Complete			8.1.01.58.04.26.01		3/14/02	3/14/02		2A		
31A60220 Q1	Submit X-600A / X-621 Draft CMI WP to Agencies			8.1.01.60.02.10		7/6/06	7/6/06		2A		
31A60270 Q1	Submit X-600A / X-621 Final CMI WP to Agencies			8.1.01.60.02.10		11/3/06	11/3/06		2A		
31A60490 Q1	Submit X-600A / X-621 Final CMS Report to Agencies			8.1.01.60.02.22							

32B52230	Q2	Submit X-701B GW Final CMS Rpt to Agencies		8.1.02.52.02.22	10/2/97	10/2/97	2A
32B52320	Q2	Submit X-701B GW Draft CMI Work Plan to Agencies		8.1.02.52.02.10	12/16/97	12/16/97	2A
32B52370	Q2	Submit X-701B GW Final CMI Work Plan to Agencies		8.1.02.52.02.10	4/15/98	4/15/98	2A
32B53445	Q2	Start X-701B Groundwater Remedial Action	8/15/99	8.1.02.52.04.26.01	8/15/99	8/15/99	2A
32B53455	Q2	X-701B Groundwater Remedial Action Complete		8.1.02.52.04.26.01	11/1/00	11/1/00	2A
32BA2230	Q2	Submit X-701B Soil Final CMS Rpt to Agencies		8.1.02.52.06.22	2/14/97	2/14/97	2A
32BA2320	Q2	Submit X-701B Soil Draft CMI Work Plan to Agencies		8.1.02.52.06.10	4/30/97	4/30/97	2A
32BA2370	Q2	Submit X-701B Soil Final CMI Work Plan to Agencies		8.1.02.52.06.10	8/28/97	8/28/97	2A
32B55445	Q2	Start X-701B Soil Remedial Action		8.1.02.52.08.26.01	10/8/98	10/8/98	2A
32B55455	Q2	X-701B Soil Remedial Action Complete		8.1.02.52.08.26.01	6/9/99	6/9/99	2A
32B56220	Q2	Submit X-744Y/G Soil Draft CMI WP to Agencies		8.1.02.52.10.10	10/4/98	10/4/98	2A
32B56270	Q2	Submit X-744Y/G Soil Final CMI WP to Agencies		8.1.02.52.10.10	2/1/99	2/1/99	2A
32B56490	Q2	Submit X-744Y/G Soil Final CMS Report to Agencies		8.1.02.52.10.22	7/21/98	7/21/98	2A
32B56412	Q2	Submit X-744Y/G Soil Draft CMS Rpt to Agencies		8.1.02.52.10.22	4/28/97	4/28/97	2A
32B61445	Q2	Start X-744Y/G Soil Remedial Action	7/13/00	8.1.02.52.12.26.01	7/13/00	7/13/00	2A
32B61455	Q2	X-744Y/G Soil Remedial Action Complete		8.1.02.52.12.26.01	1/8/02	1/8/02	2A
32B77620	Q2	Submit X-230J7 Draft CMS Rpt to Agencies		8.1.02.52.14.22	12/3/96	12/3/96	2A
32B77730	Q2	Submit X-230J7 Final CMS Rpt to Agencies		8.1.02.52.14.22	7/6/97	7/6/97	2A
32B77868	Q2	Submit X-230J7 Draft CMI Work Plan to Agencies		8.1.02.52.14.10	10/4/97	10/4/97	2A
32B77888	Q2	Submit X-230J7 Final CMI Work Plan to Agencies		8.1.02.52.14.10	1/4/98	1/4/98	2A
32B59445	Q2	Start X-230J7 Remedial Action		8.1.02.52.16.26.01	7/13/02	7/13/02	2A
32B59455	Q2	X-230J7 Remedial Action Complete		8.1.02.52.16.26.01	3/14/03	3/14/03	2A
32B12503	Q2	Submit X-705A/B Draft CMS Report to Agencies		8.1.02.54.02.22	3/1/94	3/1/94	2A
32B12120	Q2	Submit X-705A/B Draft CMI Work Plan to Agencies		8.1.02.54.02.10	5/22/96	5/22/96	2A
32B12170	Q2	Submit X-705A/B Final CMI Work Plan to Agencies		8.1.02.54.02.10	9/19/96	9/19/96	2A
32B12617	Q2	Submit X-705A/B Final CMS Report to Agencies		8.1.02.54.02.22	8/8/95	8/8/95 8/8/95 8/8/95	2A
32B54910	Q2	Start X-705A/B Remedial Action		8.1.02.54.04.26.01	5/27/96	5/27/96	2A
32B54930	Q2	Remedial Action Complete X-705A/B		8.1.02.54.04.26.01	9/30/96	9/30/96	2A
32B62220	Q2	Submit X-701C Soil Draft CMI WP to Agencies		8.1.02.56.02.10	10/4/02	10/4/02	2A
32B62270	Q2	Submit X-701C Soil Final CMI WP to Agencies		8.1.02.56.02.10	2/1/03	2/1/03	2A
32B62490	Q2	Submit X-701C Soil Final CMS Report to Agencies		8.1.02.56.02.22	7/21/02	7/21/02	2A
32B62412	Q2	Submit X-701C Soil Draft CMS Rpt to Agencies		8.1.02.56.02.22	4/28/01	4/28/01	2A
32B64220	Q2	Submit X-700 Soil Draft CMI WP to Agencies		8.1.02.56.06.10	6/4/04	6/4/04	2A
32B64270	Q2	Submit X-700 Soil Final CMI WP to Agencies		8.1.02.56.06.10	10/2/04	10/2/04	2A
32B64490	Q2	Submit X-700 Soil Final CMS Report to Agencies		8.1.02.56.06.22	3/21/04	3/21/04	2A
32B65445	Q2	Start X-700 Soil Remedial Action		8.1.02.56.08.26.01	11/16/05	11/16/05	2A
32B65455	Q2	X-700 Soil Remedial Action Complete		8.1.02.56.08.26.01	7/18/06	7/18/06	2A
32B66220	Q2	Submit X-720 Soil Draft CMI WP to Agencies		8.1.02.56.10.10	8/3/04	8/3/04	2A
32B66270	Q2	Submit X-720 Soil Final CMI WP to Agencies		8.1.02.56.10.10	12/1/04	12/1/04	2A
32B66490	Q2	Submit X-720 Soil Final CMS Report to Agencies		8.1.02.56.10.22	5/20/04	5/20/04	2A
32B67445	Q2	Start X-720 Soil Remedial Action		8.1.02.56.12.26.01	3/12/02	3/12/02	2A
32B67455	Q2	X-720 Soil Remedial Action Complete		8.1.02.56.12.26.01	11/11/02	11/11/02	2A
32B68220	Q2	Submit X-705 Draft CMI WP to Agencies		8.1.02.56.14.10	8/4/03	8/4/03	2A
32B68270	Q2	Submit X-705 Final CMI WP to Agencies		8.1.02.56.14.10	12/2/03	12/2/03	2A
32B68490	Q2	Submit X-705 Final CMS Report to Agencies		8.1.02.56.14.22	5/21/03	5/21/03	2A
32B69445	Q2	Start X-705 Remedial Action		8.1.02.56.16.26.01	9/11/02	9/11/02	2A
32B69455	Q2	X-705 Remedial Action Complete		8.1.02.56.16.26.01	5/13/03	5/13/03	2A
32B08730	Q2	Submit 7-Unit Area Final CMS Rpt to Agencies		8.1.02.56.18.22	9/17/97	9/17/97	2A
32B08868	Q2	Submit 7-Unit Area Draft CMI Work Plan to Agencies		8.1.02.56.18.10	12/16/97	12/16/97	2A
32B08888	Q2	Submit 7-Unit Area Final CMI Work Plan to Agencies		8.1.02.56.18.10	3/18/98	3/18/98	2A
32B08465	Q2	Start 7-Unit Area Groundwater Plume Remedial Action		8.1.02.56.20.26	9/1/01	9/1/01	2A
32B08475	Q2	7-Unit Area Groundwater Plume Remedial Action Complete		8.1.02.56.20.26	11/24/02	11/24/02	2A
32B72220	Q2	Submit X-633 Draft CMI WP to Agencies		8.1.02.58.02.10	10/4/02	10/4/02	2A
32B72270	Q2	Submit X-633 Final CMI WP to Agencies		8.1.02.58.02.10	2/1/03	2/1/03	2A
32B72490	Q2	Submit X-633 Final CMS Report to Agencies		8.1.02.58.02.22	7/21/02	7/21/02	2A
32B73445	Q2	Start X-633 Remedial Action		8.1.02.58.04.26.01	3/13/04	3/13/04	2A
32B73455	Q2	X-633 Remedial Action Complete		8.1.02.58.04.26.01	11/12/04	11/12/04	2A
32B76220	Q2	Submit X-747G Draft CMI WP to Agencies		8.1.02.58.10.10	10/3/00	10/3/00	2A
32B76270	Q2	Submit X-747G Final CMI WP to Agencies		8.1.02.58.10.10	1/31/01	1/31/01	2A
32B76490	Q2	Submit X-747G Final CMS Report to Agencies		8.1.02.58.10.22	7/20/00	7/20/00	2A
32B77445	Q2	Start X-747G Remedial Action		8.1.02.58.12.26.01	3/13/02	3/13/02	2A
32B77455	Q2	X-747G Remedial Action Complete		8.1.02.58.12.26.01	11/12/02	11/12/02	2A
32B80220	Q2	Submit Process Waste Lines Draft CMI WP to Agencies		8.1.02.58.18.10	10/3/01	10/3/01	2A
32B80270	Q2	Submit Process Waste Lines Final CMI WP to Agencies		8.1.02.58.18.10	1/31/02	1/31/02	2A
32B80490	Q2	Submit Process Waste Lines Final CMS Report to Agencies		8.1.02.58.18.22	7/20/01	7/20/01	2A
32B81445	Q2	Start Process Waste Lines Remedial Action		8.1.02.58.20.26.01	3/13/03	3/13/03	2A
32B81455	Q2	Process Waste Lines Remedial Action Complete		8.1.02.58.20.26.01	11/12/03	11/12/03	2A
33C06200	Q3	Submit Draft RFI Rpt to Agencies		8.1.03.50.02.08	12/10/92	12/10/92 10/92 10/92	2A
33C06285	Q3	Submit Quadwide Final RFI Report to Agencies	11/24/96	8.1.03.50.02.08	11/23/96	11/23/96	2A
33C07010	Q3	Submit Quadwide Draft CMS Work Plan to Agencies		8.1.03.50.04.06	3/10/93	3/10/93 3/10/93 3/10/93	2A
33C07135	Q3	Submit Quadwide Draft CMS Report to Agencies		8.1.03.50.04.08	4/20/95	4/20/95 4/20/95 4/20/95	2A
33C07255	Q3	Submit Quadwide Final CMS Report to Agencies		8.1.03.50.04.08	12/23/04	12/23/04	2A
33C07050	Q3	Submit Quadwide Final CMS Work Plan to Agencies		8.1.03.50.04.06	1/20/95	1/20/95 1/20/95 1/20/95	2A
33C07320	Q3	Submit Quadwide Draft CMI Work Plan to Agencies		8.1.03.50.04.12	3/8/05	3/8/05	2A
33C07370	Q3	Submit Quadwide Final CMI Work Plan to Agencies		8.1.03.50.04.12	7/6/05	7/6/05	2A
33C54010	Q3	Submit X-740 Draft CMS Rpt to Agencies		8.1.03.54.02.22	4/27/03	4/27/03	2A
33C54085	Q3	Submit X-740 Draft Final CMS Rpt to Agencies		8.1.03.54.02.22	7/27/03	7/27/03	2A
33C54140	Q3	Submit X-740 Final CMS Report to Agencies		8.1.03.54.02.22	11/25/03	11/25/03	2A
33C54225	Q3	Submit X-740 Draft CMI Work Plan to Agencies		8.1.03.54.02.10	12/25/03	12/25/03	2A
33C54280	Q3	Submit X-740 Final CMI Work Plan to Agencies		8.1.03.54.02.10	4/23/04	4/23/04	2A
33C55445	Q3	Start X-740 Remedial Action		8.1.03.54.04.26.01	7/13/05	7/13/05	2A
33C55455	Q3	X-740 Remedial Action Complete		8.1.03.54.04.26.01	3/14/06	3/14/06	2A
33C64220	Q3	Submit X-230J5 Draft CMI WP to Agencies		8.1.03.56.18.10	11/3/00	11/3/00	2A
33C64270	Q3	Submit X-230J5 Final CMI WP to Agencies		8.1.03.56.18.10	3/3/01	3/3/01	2A
33C64490	Q3	Submit X-230J5 Final CMS Report to Agencies		8.1.03.56.18.22	8/20/00	8/20/00	2A
33C65390	Q3	Submit X-230J5 CFC Package to Agencies		8.1.03.56.20.20	11/30/01	11/30/01	2A
33C65445	Q3	Start X-230J5 Remedial Action		8.1.03.56.20.26.01	4/13/02	4/13/02	2A
33C65455	Q3	X-230J5 Remedial Action Complete		8.1.03.56.20.26.01	12/13/02	12/13/02	2A
34D06230	Q4	Submit Quadwide Draft RFI Report to Agencies		8.1.04.50.02.08	8/27/93	8/27/93 8/27/93 8/27/93	2A
34D06320	Q4	Submit Quadwide Final RFI Report to Agencies		8.1.04.50.02.08	6/21/97	6/21/97	2A
34D07110	Q4	Submit Quadwide Draft CMS Work Plan to Agencies		8.1.04.50.04.06	11/23/93	11/23/93 11/23/93 11/23/93	2A
34D07225	Q4	Submit Quadwide Draft CMS Report to Agencies		8.1.04.50.04.08	4/14/95	4/14/95 4/14/95 4/14/95	2A
34D07335	Q4	Submit Quadwide Final CMS Report to Agencies		8.1.04.50.04.08	10/24/10	10/24/10	2A
34D07420	Q4	Submit Quadwide Draft CMI Work Plan to Agencies		8.1.04.50.04.12	1/7/11	1/7/11	2A
34D07470	Q4	Submit Quadwide Final CMI Work Plan to Agencies		8.1.04.50.04.12	5/7/11	5/7/11	2A
34D52035	Q4	Submit X-611A Draft CMS Rpt to Agencies		8.1.04.52.02.22	7/19/94	7/19/94 7/19/94 7/19/94	2A
34D52140	Q4	Submit X-611A Final CMS Report to Agencies		8.1.04.52.02.22	4/1/96	4/1/96	2A
34D52225	Q4	Submit X-611A Draft CMI Work Plan to Agencies		8.1.04.52.02.10	5/16/96	5/16/96	2A
34D52280	Q4	Submit X-611A Final CMI Work Plan to Agencies		8.1.04.52.02.10	8/30/96	8/30/96	2A
34D86220	Q4	Submit X-734 Draft CMI WP to Agencies		8.1.04.56.54.10	8/3/04	8/3/04	2A
34D86270	Q4	Submit X-734 Final CMI WP to Agencies		8.1.04.56.54.10	12/1/04	12/1/04	2A
34D86490	Q4	Submit X-734 Final CMS Report to Agencies		8.1.04.56.54.22	5/20/04	5/20/04	2A
34D87445	Q4	Start X-734 Remedial Action		8.1.04.56.56.26.01	1/11/06	1/11/06	2A
34D87455	Q4	X-734 Remedial Action Complete		8.1.04.56.56.26.01	5/25/07	5/25/07	2A
34D36220	Q4	Submit X-747H Draft CMI WP to Agencies		8.1.04.56.75.10	12/4/09	12/4/09	2A
34D36270	Q4	Submit X-747H Final CMI WP to Agencies		8.1.04.56.75.10	4/3/10	4/3/10	2A
34D36490	Q4	Submit X-747H Final CMS Report to Agencies		8.1.04.56.75.22	9/20/09	9/20/09	2A
34D37445	Q4	Start X-747H Remedial Action		8.1.04.56.76.26.01	5/14/11	5/14/11	2A
34D37455	Q4	X-747H Remedial Action Complete		8.1.04.56.76.26.01	1/13/12	1/13/12	2A
34D40220	Q4	Submit X-334 Draft CMI WP to Agencies		8.1.04.56.92.10	8/4/02	8/4/02	2A
34D40270	Q4	Submit X-334 Final CMI WP to Agencies		8.1.04.56.92.10	12/2/02	12/2/02	2A
34D40490	Q4	Submit X-334 Final CMS Report to Agencies		8.1.04.56.92.22	5/21/02	5/21/02	2A
34D41445	Q4	Start X-334 Remedial Action		8.1.04.56.94.26.01	1/12/04	1/12/04	2A
34D41455	Q4	X-334 Remedial Action Complete		8.1.04.56.94.26.01	9/12/04	9/12/04	2A
M2015201	C	D Close Out - X-705A		8.2.01.52.20	5/30/96	5/30/96	2A
M2015201	C	D Initiation - X-705A		8.2.01.52.20	7/17/95	7/17/95 7/17/95 7/17/95	2A
EPF50000	SUBMIT	RCRA SUBTITLE C MONITORING REPORT		8.1.06.01.10.01.96	3/1/96	3/1/96	2A
EPF50000	SUBMIT	RCRA SUBTITLE D MONITORING REPORT		8.1.06.01.10.01.96	3/1/96	3/1/96	2A
EPF50000	SUBMIT	SOLID WASTE ANNUAL GROUNDWATER MONIT. RPT		8.1.06.01.10.01.96	4/5/96	4/5/96	2A
EPF50000	SUBMIT	ANNUAL ELECTRONIC DATA IN GRITS/STAT FORMAT	3/2/96	8.1.06.01.15.96	3/1/96	3/1/96	2A
EPF50000	SUBMIT	ANNUAL RCRA RPT: GRAPHICAL AND TAB DATA	3/2/96	8.1.06.01.15.96	3/1/96	3/1/96	2A
P60102P306	YANIDE	DESTRUCTION AT Y-12 - RECEIVE SITE AGREEMENT		3/31/97	3/31/97	3/31/97	2B
P60102P408	MERCURY	PROCESSING AT INEL - RECEIVE SITE AGREEMENT		3/31/97	3/31/97	3/31/97	2B
P60102P510	DRM	COMMENCE SYSTEMS TESTING		9/30/97	9/30/97	9/30/97	2B
P60102P906	N-SITE	X-705 MICRO FILTRATION - COMMENCE OPS		12/31/97	12/31/97	12/31/97	2B
P60102P918	-705	- COMP PROCESSING OF X-705 MIXED WASTE STREAM		3/31/98	3/31/98	3/31/98	2B
P60102P520	DRM	COMPLETE PROCESSING OF (DRM) WASTE STREAM		6/30/98	6/30/98		

P60102P10STABILIZ'N-SUBMIT PERMIT APPLICATIONS TO APPROP. AGENCIES	9/30/00	6.01.02	9/30/00	9/30/00	2B
P60102P605AB PACK TREAT - RECEIVE SITE AGREEMENT	3/31/00	6.01.02	3/31/00	3/31/00	2B
P60102P805UTURE INCIN-DETERMINE ADAPT NEED FOR COMM.AVAL. TREAT	12/31/99	6.01.02	12/31/99	12/31/99	2B
P60102P220ARBON REGENERATION - COMMENCE SYSTEMS TESTING	9/30/01	8.6.01.02	9/30/01	9/30/01	2B
P60102P118TABILIZATION ONSITE - PROCURE CONTRACT WITH VENDOR	12/31/00	6.01.02	12/31/00	12/31/00	2B
P60102P128TABILIZATION - COMMENCE SYSTEMS TESTING	9/30/01	8.6.01.02	9/30/01	9/30/01	2B
P60102Q3CMETAL RECOVERY-DETERMINE ADAPT NEED FOR COMM.AVAL. TREAT	12/31/00	6.01.02	12/31/00	12/31/00	2B
P60102Q4CPHYS CHEM TRET-DETERMINE ADAPT NEED FOR COMM.AVAL. TREAT	12/31/00	6.01.02	12/31/00	12/31/00	2B
P60102P226ARBON REGENERATION - COMMENCE OPERATIONS	12/31/01	8.6.01.02	12/31/01	12/31/01	2B
P60102P125TABILIZATION - COMMENCE OPERATIONS	9/30/02	8.6.01.02	9/30/02	9/30/02	2B
P601022205CONTAMINATED SCRAPMTAL PACKAGING FACILITY - INITIATE SCOPING	6/1/94	8.6.01.02	6/1/94	6/1/94	2B
P601022206OFFICE\CHANGEHOUSE - INITIATE SCOPING	6/1/94	8.6.01.02	6/1/94	6/1/94	2B
P601022207DDR FFCA - SUBMIT DRAFT SITE TREATMENT PLAN TO DOE	8/31/94	8.6.01.02	8/31/94	8/31/94	2B
P601022208DEACTIVATE REACTIVE METALS (DRM) PROCURE CONTRACT WITH VENDOR	9/30/95	6.01.02	9/30/96	9/30/96	2B
P60202P116ONTAINERIZED SLUDGE REPACKAGING - REPACKAGING COMPLETE	8/26/97	6.02.02	8/26/97	8/26/97	2B
P60201P106OMPLETE COVER INSTALLATION FOR X-3346 & X7745 STORAGE PADS	9/30/95	6.02	9/30/96	9/30/96	2B
P60202P105NITITATE PCB EMPTY CONTAINER REDUCTION PROGRAM		8.6.02.05	6/29/95	6/29/95	2B
P60202P110NPLEMENT STORAGE BAR CODE READER PROGRAM	10/1/95	6.02.05	10/1/95	10/1/95	2B
P60302P106OMPLETE REPACKAGING OF GAS CYLINDERS	3/29/95	6.03.02	3/29/96	3/29/96	2B
P60301P020OMPLETE EVALUATION OF LANDFILL DISPOSAL OPTIONS/FINAL RECMD	7/30/99	6.03.01	7/30/94	7/30/94	2B
P60300P008FINALIZE OPEN SHIPMENT CERTIFICATIONISSUE OF TRAINING	10/1/95	6.03	10/1/95	10/1/95	2B
P60303P108RELIEF FROM OFFSITE SHIPMENT MORATORIUM FOR SURFACE CONTAMIN	12/31/99	6.03.03	12/31/99	12/31/99	2B
P60305P108FFSITE RCRA/MW DISPOSAL-COMLETE INITAL ENVIROCARE SHIPMENT	5/8/99	6.03.05	5/8/94	5/8/94	2B
P60306P006OMPLETE WASTE ACCEPTANCE CRITERIA FOR SHIPMENTS OF MW & LLW		8.6.03.06	9/30/94	9/30/94	2B
31A50130 Q1 Deliver Phase II Draft RFI Rpt to DOE		8.1.01.50.02.08	5/6/94	5/6/94	2B
31A50168 Q1 Submit Quadwide Final RFI Report to DOE		8.1.01.50.02.08	8/11/96	8/11/96	2B
31A07105 Q1 Deliver Quadwide Draft CMS Rpt to DOE		8.1.01.50.04.08	3/15/94	3/15/94	2B
31A07210 Q1 Deliver Quadwide Final CMS Rpt to DOE		8.1.01.50.04.08	5/30/08	5/30/08	2B
31A07305 Q1 Deliver Quadwide Draft CMI Work Plan to DOE		8.1.01.50.04.12	8/13/08	8/13/08	2B
31A49030 Deliver Draft Air RFI Work Plan to DOE		8.1.01.50.08.06	1/14/93	1/14/93	2B
31A49255 Deliver Draft Air RFI Rpt to DOE		8.1.01.50.08.08	1/27/95	1/27/95	2B
31A48115 Deliver Draft ULB BRC Watersheds Rpt to DOE		8.1.01.50.10.08	5/22/94	5/22/94	2B
31A48225 Deliver Sitewide Draft BERA Report to DOE		8.1.01.50.10.08	10/17/94	10/17/94	2B
31A11040 Deliver Draft Sitewide Human Health RA Rpt to DOE -Prelim 5-15-95		8.1.01.50.12.08	11/4/95	11/4/95	2B
31A40205 Q1 Deliver Sitewide Draft CMI Work Plan to DOE		8.1.01.50.18.12	11/7/16	11/7/16	2B
31A40484 Q1 Deliver Sitewide Final CMS Report to DOE		8.1.01.50.18.08	8/24/16	8/24/16	2B
31A40404 Q1 Deliver Sitewide Draft CMS Rpt to DOE		8.1.01.50.18.08	6/2/15	6/2/15	2B
31A58205 Q1 Deliver West Drainage Ditch Draft CMI Work Plan to DOE		8.1.01.52.02.10	4/5/97	4/5/97	2B
31A58440 Q1 Deliver West Drainage Ditch Draft CMS Report to DOE		8.1.01.52.02.22	6/29/96	6/29/96	2B
31A58484 Q1 Deliver West Drainage Ditch Final CMS Report to DOE		8.1.01.52.02.22	1/20/97	1/20/97	2B
31A52205 Q1 Deliver Sitewide Surface Drainage Draft CMI Work Plan to DOE		8.1.01.52.06.10	1/18/98	1/18/98	2B
31A52440 Q1 Deliver Sitewide Surface Drainage Draft CMS Rpt to DOE		8.1.01.52.06.22	2/27/97	2/27/97	2B
31A52484 Q1 Deliver Sitewide Surface Drainage Final CMS Report to DOE		8.1.01.52.06.22	11/4/97	11/4/97	2B
31A55092 Q1 Deliver X-749/120 Final CMS Rpt to DOE		8.1.01.54.02.22	3/11/97	3/11/97	2B
31A55235 Q1 Deliver X-749/120 Draft CMI Work Plan to DOE		8.1.01.54.02.10	4/18/97	4/18/97	2B
31A57205 Q1 Deliver X-231A Draft CMI Work Plan to DOE		8.1.01.56.02.10	2/28/98	2/28/98	2B
31A57310 Q1 Deliver X-231A Draft CMS Report to DOE		8.1.01.56.02.22	2/22/97	2/22/97	2B
31A57484 Q1 Deliver X-231A Final CMS Report to DOE		8.1.01.56.02.22	12/15/97	12/15/97	2B
31A21205 Q1 Deliver X-231B Draft CMI Work Plan to DOE		8.1.01.56.06.10	1/27/98	1/27/98	2B
31A21484 Q1 Deliver X-231B Final CMS Report to DOE		8.1.01.56.06.22	11/29/97	11/29/97	2B
31A21310 Q1 Deliver X-231B Draft CMS Report to DOE		8.1.01.56.06.22	12/11/96	12/11/96	2B
31A56205 Q1 Deliver 5-Unit Groundwater Draft CMI Work Plan to DOE		8.1.01.56.10.10	12/2/97	12/2/97	2B
31A56484 Q1 Deliver 5-Unit Groundwater Final CMS Report to DOE		8.1.01.56.10.22	8/19/97	8/19/97	2B
31A56310 Q1 Deliver 5-Unit Groundwater Draft CMS Report to DOE		8.1.01.56.10.22	8/10/96	8/10/96	2B
31A12205 Q1 Deliver PKLF Draft CMI Work Plan to DOE		8.1.01.58.02.10	4/4/96	4/4/96	2B
31A60205 Q1 Deliver X-600A / X-621 Draft CMI Work Plan to DOE		8.1.01.60.02.10	5/18/06	5/18/06	2B
31A60484 Q1 Deliver X-600A / X-621 Final CMS Report to DOE		8.1.01.60.02.22	3/4/06	3/4/06	2B
31A61350 Q1 Deliver X-600A/X-621 Soil 90% Design Package to DOE		8.1.01.60.04.20	7/1/07	7/1/07	2B
31A68205 Q1 Deliver X-710 Soil Draft CMI Work Plan to DOE		8.1.01.60.18.10	6/16/06	6/16/06	2B
31A68484 Q1 Deliver X-710 Soil Final CMS Report to DOE		8.1.01.60.18.22	4/2/06	4/2/06	2B
31A69350 Q1 Deliver X-710 90% Design Package to DOE		8.1.01.60.20.20	7/30/07	7/30/07	2B
31A70205 Q1 Deliver X-760 Draft CMI Work Plan to DOE		8.1.01.60.22.10	6/16/07	6/16/07	2B
31A70484 Q1 Deliver X-760 Final CMS Report to DOE		8.1.01.60.22.22	4/2/07	4/2/07	2B
31A71350 Q1 Deliver X-760 90% Design Package to DOE		8.1.01.60.24.20	7/29/08	7/29/08	2B
32B06140 Q2 Deliver Phase II Draft RFI Rpt to DOE		8.1.02.50.02.08	5/6/94	5/6/94	2B
32B07210 Q2 Deliver Quadwide Draft CMS Report to DOE	5/25/99	1.02.50.04.08	1/18/94	1/18/94	2B
32B07325 Q2 Deliver Quadwide Final CMS Rpt to DOE		8.1.02.50.04.08	5/30/05	5/30/05	2B
32B07405 Q2 Deliver Quadwide Draft CMI Work Plan to DOE		8.1.02.50.04.12	8/13/05	8/13/05	2B
32B52215 Q2 Deliver X-701B GW Final CMS Rpt to DOE		8.1.02.52.02.22	8/24/97	8/24/97	2B
32B52305 Q2 Deliver X-701B GW Draft CMI Work Plan to DOE		8.1.02.52.02.10	10/28/97	10/28/97	2B
32BA2215 Q2 Deliver X-701B Soil Final CMS Rpt to DOE		8.1.02.52.06.22	12/27/96	12/27/96	2B
32BA2305 Q2 Deliver X-701B Soil Draft CMI Work Plan to DOE		8.1.02.52.06.10	3/12/97	3/12/97	2B
32B56205 Q2 Deliver X-744Y/G Soil Draft CMI Work Plan to DOE		8.1.02.52.10.10	8/16/98	8/16/98	2B
32B56484 Q2 Deliver X-744Y/G Soil Final CMS Report to DOE		8.1.02.52.10.22	6/2/98	6/2/98	2B
32B56404 Q2 Deliver X-744Y/G Soil Draft CMS Rpt to DOE		8.1.02.52.10.22	3/10/97	3/10/97	2B
32BJ7715 Q2 Deliver X-230J7 Final CMS Rpt to DOE		8.1.02.52.14.22	5/28/97	5/28/97	2B
32BJ7862 Q2 Deliver X-230J7 Draft CMI Work Plan to DOE		8.1.02.52.14.10	8/27/97	8/27/97	2B
32BJ7882 Q2 Deliver X-230J7 Final CMI Work Plan to DOE		8.1.02.52.14.10	11/27/97	11/27/97	2B
32B12105 Q2 Submit X-705A/B Draft CMI Work Plan to DOE		8.1.02.54.02.10	4/3/96	4/3/96	2B
32B62205 Q2 Deliver X-701C Soil Draft CMI Work Plan to DOE		8.1.02.56.02.10	8/16/02	8/16/02	2B
32B62484 Q2 Deliver X-701C Soil Final CMS Report to DOE		8.1.02.56.02.22	6/2/02	6/2/02	2B
32B62404 Q2 Deliver X-701C Soil Draft CMS Rpt to DOE		8.1.02.56.02.22	3/10/01	3/10/01	2B
32B64205 Q2 Deliver X-700 Soil Draft CMI Work Plan to DOE		8.1.02.56.06.10	4/16/04	4/16/04	2B
32B64484 Q2 Deliver X-700 Soil Final CMS Report to DOE		8.1.02.56.06.22	2/1/04	2/1/04	2B
32B66205 Q2 Deliver X-720 Soil Draft CMI Work Plan to DOE		8.1.02.56.10.10	6/15/04	6/15/04	2B
32B66484 Q2 Deliver X-720 Soil Final CMS Report to DOE		8.1.02.56.10.22	4/1/04	4/1/04	2B
32B68205 Q2 Deliver X-705 Draft CMI Work Plan to DOE		8.1.02.56.14.10	6/16/03	6/16/03	2B
32B68484 Q2 Deliver X-705 Final CMS Report to DOE		8.1.02.56.14.22	4/2/03	4/2/03	2B
32BU8715 Q2 Deliver 7-Unit Area Final CMS Rpt to DOE		8.1.02.56.18.22	8/10/97	8/10/97	2B
32BU8862 Q2 Deliver 7-Unit Area Draft CMI Work Plan to DOE		8.1.02.56.18.10	11/8/97	11/8/97	2B
32BU8882 Q2 Deliver 7-Unit Area Final CMI Work Plan to DOE		8.1.02.56.18.10	2/8/98	2/8/98	2B
32B72205 Q2 Deliver X-633 Draft CMI Work Plan to DOE		8.1.02.58.02.10	8/16/02	8/16/02	2B
32B72484 Q2 Deliver X-633 Final CMS Report to DOE		8.1.02.58.02.22	6/2/02	6/2/02	2B
32B76205 Q2 Deliver X-747G Draft CMI Work Plan to DOE		8.1.02.58.10.10	8/15/00	8/15/00	2B
32B76484 Q2 Deliver X-747G Final CMS Report to DOE		8.1.02.58.10.22	6/1/00	6/1/00	2B
32B80205 Q2 Deliver Process Waste Lines Draft CMI Work Plan to DOE		8.1.02.58.18.10	8/15/01	8/15/01	2B
32B80484 Q2 Deliver Process Waste Lines Final CMS Report to DOE		8.1.02.58.18.22	6/1/01	6/1/01	2B
33C07035 Q3 Deliver Final CMS Work Plan to DOE		8.1.03.50.04.06	1/13/95	1/13/95	2B
33C07115 Q3 Deliver Draft CMS Rpt to DOE		8.1.03.50.04.08	2/28/95	2/28/95	2B
33C07240 Q3 Deliver Quadwide Final CMS Rpt to DOE		8.1.03.50.04.08	11/4/04	11/4/04	2B
33C07305 Q3 Deliver Quadwide Draft CMI Work Plan to DOE		8.1.03.50.04.12	1/18/05	1/18/05	2B
33C64205 Q3 Deliver X-230J5 Draft CMI Work Plan to DOE		8.1.03.56.18.10	9/15/00	9/15/00	2B
33C64484 Q3 Deliver X-230J5 Final CMS Report to DOE		8.1.03.56.18.22	7/2/00	7/2/00	2B
34D06220 Q4 Deliver Draft RFI Rpt to DOE		8.1.04.50.02.08	8/13/93	8/13/93	2B
34D07105 Q4 Deliver Draft CMS Work Plan to DOE		8.1.04.50.04.06	11/2/93	11/2/93	2B
34D07205 Q4 Deliver Draft CMS Rpt to DOE		8.1.04.50.04.08	2/8/95	2/8/95	2B
34D07320 Q4 Deliver Quadwide Final CMS Rpt to DOE		8.1.04.50.04.08	9/5/10	9/5/10	2B
34D07405 Q4 Deliver Quadwide Draft CMI Work Plan to DOE		8.1.04.50.04.12	11/19/10	11/19/10	2B
34D52125 Q4 Deliver X-611A Final CMS Rpt to DOE		8.1.04.52.02.22	3/3/96	3/3/96	2B
34D52205 Q4 Deliver X-611A Draft CMI Work Plan to DOE		8.1.04.52.02.10	3/28/96	3/28/96	2B
34D52265 Q4 Deliver X-611A Final CMI Work Plan to DOE		8.1.04.52.02.10	7/12/96	7/12/96	2B
34D86205 Q4 Deliver X-734 Draft CMI Work Plan to DOE		8.1.04.56.54.10	6/15/04	6/15/04	2B
34D86484 Q4 Deliver X-734 Final CMS Report to DOE		8.1.04.56.54.22	4/1/04	4/1/04	2B
34D36205 Q4 Deliver X-747H Draft CMI Work Plan to DOE		8.1.04.56.75.10	10/16/00	10/16/00	2B
34D36484 Q4 Deliver X-747H Final CMS Report to DOE		8.1.04.56.75.22	8/2/09	8/2/09	2B
34D40205 Q4 Deliver X-334 Draft CMI Work Plan to DOE		8.1.04.56.92.10	6/16/02	6/16/02	2B
34D40484 Q4 Deliver X-334 Final CMS Report to DOE		8.1.04.56.92.22	4/2/02	4/2/02	2B
EPM90000QUARTERLY REPORT	10/14/95	8.4.01.01.01.05.01.96	10/13/95	10/13/95	2B
EPM90000QUARTERLY REPORT	1/13/96	8.4.01.01.01.05.01.96	1/12/96	1/12/96	2B
EPM90000QUARTERLY REPORT	4/13/96	8.4.01.01.01.05.01.96	4/12/96	4/12/96	2B
EPM90000QUARTERLY REPORT	7/13/96	8.4.01.01.01.05.01.96	7/12/96	7/12/96	2B
EPM90000X-231 Condensate Drain-COMLETE		8.4.01.01.01.10.01.96	7/19/96	7/19/96	2B
EPM90001X-749A Drainage-COMLETE		8.4.01.01.01.10.10.96	8/30/96	8/30/96	2B
EPM90001X-749 Drainage-COMLETE		8.4.01.01.01.10.15.96	9/27/96	9/27/96	2B
31A49322 Submit Final Air RFI Rpt to Agencies		8.1.01.50.08.08	7/26/97	7/26/97	3
31A54557 Q1 X-749/120 Pilot Scale Facility Operational	2/16/96	8.1.01.54.03.04.40	3/5/96	3/5/96	3
33C55201 Q3 Remedial Action/Closure End - X-740 Facility		8.1.03.54.04.08.26	8/30/96	8/30/96	3
34D53260 Q4 X-611A Interim Remedial Action Complete		8.1.04.52.04.08.26	9/30/96	9/30/96	3
34D16255 Q4 Verification of Clean or Contaminated Closure		8.1.04.54.04.08.26	5/18/95	5/18/95	2B
31A50025 Q1 Receive Agencies Cmmts to Draft RFI Work Plan		8.1.01.50.02.06	6/25/92	6/25/92	4
31A50035 Q1 Submit Final RFI Work Plan to Agencies		8.1.01.50.02.06	7/25/92	7/25/92	2B

31A50055	Q1 Submit Phase II Draft RFI Work Plan to Agencies	8.1.01.50.02.06	6/3/93	6/3/93	6/3/93	4
31A50070	Q1 Receive OEPA Approval of Phase II RFI Work Plan	8.1.01.50.02.06	10/4/93	10/4/93	10/4/93	4
31A50075	Q1 Receive USEPA Cmnts to Phase II Draft RFI Work Plan	8.1.01.50.02.06	12/3/93	12/3/93	12/3/93	4
31A50085	Q1 Receive USEPA Approval to Phase II Draft RFI Work Plan	8.1.01.50.02.06	1/4/94	1/4/94	1/4/94	4
31A50193	Q1 Receive OEPA Approval of Phase II Final RFI Rpt	8.1.01.50.02.08	1/27/97	1/27/97		4
31A50195	Q1 Receive USEPA Approval of Phase II Final RFI Rpt	8.1.01.50.02.08	1/27/97	1/27/97		4
31A50015	Q1 Submit Draft RFI Work Plan to Agencies	8.1.01.50.02.06	2/19/92	2/19/92	2/19/92	4
31A07010	Q1 Submit Draft CMS Work Plan to Agencies	8.1.01.50.04.06	5/15/92	5/15/92	5/15/92	92
31A07020	Q1 Receive Agencies Cmnts to Draft CMS Work Plan	8.1.01.50.04.06	8/2/92	8/2/92	8/2/92	92
31A07030	Q1 Submit Revised Draft CMS Work Plan to Agencies	8.1.01.50.04.06	10/2/92	10/2/92	10/2/92	92
31A07040	Q1 Receive Agencies Cmnts to Revised Draft CMS Work Plan	8.1.01.50.04.06	12/25/92	12/25/92	12/25/92	92
31A07050	Q1 Submit Draft Final CMS Work Plan to Agencies	8.1.01.50.04.06	1/25/93	1/25/93	1/25/93	98
31A07065	Q1 Receive OEPA Cmnts to Draft Final CMS Work Plan	8.1.01.50.04.06	5/14/93	5/14/93	5/14/93	98
31A07070	Q1 Receive USEPA Cmnts to Draft Final CMS Work Plan	8.1.01.50.04.06	7/12/93	7/12/93	7/12/93	98
31A07085	Q1 Submit Final Quadwide CMS Work Plan to Agencies	8.1.01.50.04.06	10/1/93	10/1/93	10/1/93	98
31A07096	Q1 Receive OEPA Approval Final CMS Work Plan	8.1.01.50.04.06	11/1/93	11/1/93	11/1/93	98
31A07098	Q1 Receive USEPA Approval Final CMS Work Plan	8.1.01.50.04.06	11/1/93	11/1/93	11/1/93	98
31A07135	Q1 Receive OEPA Cmnts to Draft CMS Rpt	8.1.01.50.04.08	10/5/94	10/5/94	10/5/94	94
31A07140	Q1 Receive USEPA Cmnts to Draft CMS Rpt	8.1.01.50.04.08	10/27/94	10/27/94	10/27/94	94
31A07155	Q1 Deliver Draft Final CMS Rpt to DOE	8.1.01.50.04.08	9/18/07	9/18/07		4
31A07170	Q1 Submit Draft Final CMS Rpt to Agencies	8.1.01.50.04.08	11/6/07	11/6/07		4
31A07190	Q1 Receive OEPA Cmnts to Draft Final CMS Rpt	8.1.01.50.04.08	2/4/08	2/4/08		4
31A07200	Q1 Receive Public Cmnts to Draft Final CMS Rpt	8.1.01.50.04.08	5/4/08	5/4/08		4
31A07240	Q1 Receive OEPA Approval Final CMS Rpt	8.1.01.50.04.08	8/17/08	8/17/08		4
31A07245	Q1 Receive USEPA Approval Final CMS Rpt	8.1.01.50.04.08	8/17/08	8/17/08		4
31A07191	Q1 Receive USEPA Cmnts to Draft Final CMS Rpt	8.1.01.50.04.08	2/4/08	2/4/08		4
31A07335	Q1 Receive OEPA Comments to Quadwide Draft CMI WP	8.1.01.50.04.12	12/30/08	12/30/08		4
31A07340	Q1 Receive USEPA Comments to Quadwide Draft CMI WP	8.1.01.50.04.12	12/30/08	12/30/08		4
31A07405	Q1 Receive OEPA Approval Quadwide Final CMI WP	8.1.01.50.04.12	5/29/09	5/29/09		4
31A07407	Q1 Receive USEPA Approval Quadwide Final CMI WP	8.1.01.50.04.12	5/29/09	5/29/09		4
31A49020	Receive Agencies Cmnts to Draft Air RFI WP	8.1.01.50.08.06	7/14/92	7/14/92	7/14/92	92
31A49045	Submit Draft Final Air RFI Work Plan to Agencies	8.1.01.50.08.06	1/26/93	1/26/93	1/26/93	4
31A49065	Receive Agencies Approval Final Air RFI WP	8.1.01.50.08.06	10/8/93	10/8/93	10/8/93	4
31A49105	Submit Draft Air RFI QAPP to Agencies	8.1.01.50.08.06	5/14/92	5/14/92	5/14/92	4
31A49130	Submit Draft Final Air RFI QAPP to Agencies	8.1.01.50.08.06	1/26/93	1/26/93	1/26/93	4
31A49145	Receive OEPA Cmnts to Draft Final Air RFI QAPP	8.1.01.50.08.06	4/5/93	4/5/93	4/5/93	4
31A49150	Receive USEPA Cmnts to Draft Final Air RFI QAPP	8.1.01.50.08.06	3/1/93	3/1/93	3/1/93	4
31A49152	Rcvd USEPA Adequacy Review Ltr Air RFI QAPP	8.1.01.50.08.06	3/1/93	3/1/93	3/1/93	4
31A49165	Submit Final Air RFI QAPP to Agencies	8.1.01.50.08.06	6/20/93	6/20/93	6/20/93	4
31A49190	Receive Agencies Approval Final Air RFI QAPP	8.1.01.50.08.06	10/8/93	10/8/93	10/8/93	4
31A49271	Receive OEPA Cmnts to Draft Air RFI Rpt	8.1.01.50.08.08	1/23/96	1/23/96		4
31A49274	Receive USEPA Cmnts to Draft Air RFI Rpt	8.1.01.50.08.08	1/23/96	1/23/96		4
31A49283	Deliver Draft Final Air RFI Rpt to DOE	8.1.01.50.08.08	3/23/96	3/23/96		4
31A49292	Submit Draft Final Air RFI Rpt to Agencies	8.1.01.50.08.08	5/12/96	5/12/96		4
31A49301	Receive OEPA Cmnts to Draft Final Air RFI Rpt	8.1.01.50.08.08	4/7/97	4/7/97		4
31A49304	Receive USEPA Cmnts to Drft Final Air RFI Rpt	8.1.01.50.08.08	4/7/97	4/7/97		4
31A49313	Deliver Final Air RFI Rpt to DOE	8.1.01.50.08.08	6/6/97	6/6/97		4
31A49335	Receive OEPA Approval Final Air RFI Rpt	8.1.01.50.08.08	10/24/97	10/24/97		4
31A49337	Receive USEPA Approval Final Air RFI Rpt	8.1.01.50.08.08	10/24/97	10/24/97		4
31A49200	Start Air RFI Field Work	8.1.01.50.08.07	10/18/93	10/18/93	10/18/93	98
31A49252	Submit Draft Air RFI Rpt to MMES	8.1.01.50.08.08	12/27/94	12/27/94	12/27/94	94
31A49264	Submit Air RFI Level D Data to USEPA	8.1.01.50.08.08	4/28/95	4/28/95	4/28/95	96
31A48010	Submit Pre-Draft BERA Work Plan to Agencies	8.1.01.50.10.06	12/8/92	12/8/92	12/8/92	4
31A48030	Submit Draft BERA Work Plan to Agencies	8.1.01.50.10.06	4/13/93	4/13/93	4/13/93	4
31A48050	Submit Draft Final BERA Work Plan to Agencies	8.1.01.50.10.06	6/23/93	6/23/93	6/23/93	4
31A48075	Submit Final BERA Work Plan to Agencies	8.1.01.50.10.06	10/8/93	10/8/93	10/8/93	4
31A48088	Receive OEPA Approval Final BERA Work Plan	8.1.01.50.10.06	12/7/93	12/7/93	12/7/93	4
31A48090	Receive USEPA Conditnl Approval(Addendum Rqd) Final BERA Work Pla	8.1.01.50.10.06	11/30/93	11/30/93	11/30/93	4
31A48094	Submit to USEPA Rqd Addendum to Final BERA Work Plan	8.1.01.50.10.06	1/15/94	1/15/94	1/15/94	4
31A48265	Deliver Final Sitewide BERA Rpt to DOE	8.1.01.50.10.08	5/27/96	5/27/96		4
31A48280	Submit Sitewide Final BERA Report to Agencies	8.1.01.50.10.08	7/16/96	7/16/96		4
31A48295	Receive OEPA Approval Final Sitewide BERA Rpt	8.1.01.50.10.08	2/11/97	2/11/97		4
31A48297	Receive USEPA Approval Final Sitewide BERA Rpt	8.1.01.50.10.08	2/11/97	2/11/97		4
31A11080	Submit Sitewide Final Human Health Report to Agencies	8.1.01.50.12.08	11/29/96	11/29/96		4
31A11095	Receive OEPA Approval on Final Sitewide Human Health RA Rpt	8.1.01.50.12.08	3/29/97	3/29/97		4
31A11097	Receive USEPA Approval on Final Sitewide Human Health RA Rpt	8.1.01.50.12.08	3/29/97	3/29/97		4
31A11017	Submit Draft Sitewide Human Health Work Plan to Agencies	8.1.01.50.12.06	2/24/95	2/24/95	2/24/95	96
31A47040	BSI Laboratory Analyses Complete	8/15/998.1.01.50.14.07	8/25/94	8/25/94	8/25/94	94
31A47145	Submit Final Background Sampling Investigation Rpt to Agencies	8.1.01.50.14.08	9/15/95	9/15/95	9/15/95	96
31A47170	Receive OEPA Approval Final BSI Rpt	8.1.01.50.14.08	10/9/96	10/9/96		4
31A47175	Receive USEPA Approval Final BSI Rpt	8.1.01.50.14.08	10/9/96	10/9/96		4
31A40235	Q1 Receive OEPA Comments to Sitewide Draft CMI Work Plan	8.1.01.50.18.12	3/26/17	3/26/17		4
31A40240	Q1 Receive USEPA Comments to Sitewide Draft CMI Work Plan	8.1.01.50.18.12	3/26/17	3/26/17		4
31A40295	Q1 Receive OEPA Approval Sitewide Final CMI Work Plan	8.1.01.50.18.12	8/23/17	8/23/17		4
31A40297	Q1 Receive USEPA Approval Sitewide Final CMI Work Plan	8.1.01.50.18.12	8/23/17	8/23/17		4
31A40440	Q1 Deliver Sitewide Draft Final CMS Rpt to DOE	8.1.01.50.18.08	12/18/15	12/18/15		4
31A40455	Q1 Submit Sitewide Draft Final CMS Rpt to Agencies	8.1.01.50.18.08	2/5/16	2/5/16		4
31A40470	Q1 Receive OEPA Comments to Sitewide Draft Final CMS Report	8.1.01.50.18.08	5/5/16	5/5/16		4
31A40496	Q1 Receive OEPA Approval Sitewide Final CMS Report	8.1.01.50.18.08	11/11/16	11/11/16		4
31A40498	Q1 Receive USEPA Approval Sitewide Final CMS Report	8.1.01.50.18.08	11/11/16	11/11/16		4
31A40480	Q1 Receive Public Comments to Sitewide Draft Final CMS Re	8.1.01.50.18.08	8/3/16	8/3/16		4
31A40471	Q1 Receive USEPA Comments to Sitewide Draft Final CMS Rep	8.1.01.50.18.08	5/5/16	5/5/16		4
31A40418	Q1 Receive OEPA Comments to Sitewide Draft CMS Report	8.1.01.50.18.08	10/19/15	10/19/15		4
31A40420	Q1 Receive USEPA Comments to Sitewide Draft CMS Report	8.1.01.50.18.08	10/19/15	10/19/15		4
31A58235	Q1 Receive OEPA Cmnts to West Drainage Ditch Draft CMI Work Plan	8.1.01.52.02.10	8/22/97	8/22/97		4
31A58240	Q1 Receive USEPA Cmnts to West Drainage Ditch Draft CMI Work Plan	8.1.01.52.02.10	8/22/97	8/22/97		4
31A58295	Q1 Receive OEPA Approval West Drainage Ditch Final CMI Work Plan	8.1.01.52.02.10	1/19/98	1/19/98		4
31A58297	Q1 Receive USEPA Approval West Drainage Ditch Final CMI Work Plan	8.1.01.52.02.10	1/19/98	1/19/98		4
31A58470	Q1 Receive OEPA Cmnts to West Drainage Ditch Draft CMS Rpt	8.1.01.52.02.22	10/1/96	10/1/96		4
31A58496	Q1 Receive OEPA Approval West Drainage Ditch Final CMS Report	8.1.01.52.02.22	4/9/97	4/9/97		4
31A58498	Q1 Receive USEPA Approval West Drainage Ditch Final CMS Report	8.1.01.52.02.22	4/9/97	4/9/97		4
31A58480	Q1 Receive Public Cmnts to W. Drainage Ditch Draft CMS Rpt	8.1.01.52.02.22	12/30/96	12/30/96		4
31A58471	Q1 Receive USEPA Cmnts to West Drainage Ditch Draft CMS Rpt	8.1.01.52.02.22	10/1/96	10/1/96		4
31A53301	Q1 Start West Drainage Ditch Title I/II Design	8.1.01.52.04.20	1/20/98	1/20/98		4
31A53350	Q1 Deliver West Drainage Ditch 90% Design Package to DOE	8.1.01.52.04.20	5/19/98	5/19/98		4
31A53390	Q1 Submit West Drainage Ditch CFC Package to Agencies	8.1.01.52.04.20	6/20/98	6/20/98		4
31A53425	Q1 Receive OEPA Approval West Drainage Ditch CFC Package	8.1.01.52.04.20	10/19/98	10/19/98		4
31A53430	Q1 Receive USEPA Approval West Drainage Ditch CFC Package	8.1.01.52.04.20	10/19/98	10/19/98		4
31A53505	Q1 Deliver West Drainage Ditch Construction Certification Rpt to	8.1.01.52.04.28	3/13/01	3/13/01		4
31A53520	Q1 Submit West Ditch Construction Certification Rpt to DOE	8.1.01.52.04.28	4/12/01	4/12/01		4
31A53440	Q1 Award West Drainage Ditch Remedial Action Contract	8.1.01.52.04.24	6/22/99	6/22/99		4
31A52235	Q1 Receive OEPA Cmnts to Sitewide Surface Drainage Draft CMI WP	8.1.01.52.06.10	6/6/98	6/6/98		4
31A52240	Q1 Receive USEPA Cmnts to Sitewide Surface Drainage Draft CMI WP	8.1.01.52.06.10	6/6/98	6/6/98		4
31A52295	Q1 Receive OEPA Approval Sitewide Surface Drainage Final CMI WP	8.1.01.52.06.10	11/3/98	11/3/98		4
31A52297	Q1 Receive USEPA Approval Sitewide Surface Drainage Final CMI WP	8.1.01.52.06.10	11/3/98	11/3/98		4
31A52470	Q1 Receive OEPA Cmnts to SS Drainage Draft CMS Report	8.1.01.52.06.22	7/16/97	7/16/97		4
31A52496	Q1 Receive OEPA Approval Sitewide Surface Drainage Final CMS Rpt	8.1.01.52.06.22	1/22/98	1/22/98		4
31A52498	Q1 Receive USEPA Approval Sitewide Surface Drainage Final CMS Rpt	8.1.01.52.06.22	1/22/98	1/22/98		4
31A52480	Q1 Receive Public Cmnts to SS Drainage Draft CMS Report	8.1.01.52.06.22	10/5/97	10/5/97		4
31A52471	Q1 Receive USEPA Cmnts to SS Drainage Draft CMS Report	8.1.01.52.06.22	7/16/97	7/16/97		4
31A19301	Q1 Start Sitewide Surface Drng Title I/II Design	8.1.01.52.08.20	11/1/01	11/1/01		4
31A19350	Q1 Deliver Sitewide Surface Drng 90% Design Package to DOE	8.1.01.52.08.20	2/28/02	2/28/02		4
31A19390	Q1 Submit Sitewide Surface Drainage CFC Package to Agencies	8.1.01.52.08.20	4/1/02	4/1/02		4
31A19425	Q1 Receive OEPA Approval Sitewide Surface Drng CFC Package	8.1.01.52.08.20	7/31/02	7/31/02		4
31A19430	Q1 Receive USEPA Approval Sitewide Surface Drng CFC Package	8.1.01.52.08.20	7/31/02	7/31/02		4
31A19505	Q1 Deliver Sitewide Surface Drng Construction Certification Rpt t	8.1.01.52.08.28	5/3/04	5/3/04		4
31A19520	Q1 Submit Sitewide Surface Drng ion Certification Rpt to DOE	8.1.01.52.08.28	6/2/04	6/2/04		4
31A19440	Q1 Award Sitewide Surface Drng Remedial Action Contract	8.1.01.52.08.24	8/12/02	8/12/02		4
31A55020	Q1 Receive OEPA Cmnts to X-749/120 Draft CMS Rpt	8.1.01.54.02.22	7/25/94	7/25/94	7/25/94	94
31A55025	Q1 Receive USEPA Cmnts to X-749/120 Draft CMS Rpt	8.1.01.54.02.22	11/9/94	11/9/94	11/9/94	94
31A55078	Q1 Deliver X-749/120 Draft Final CMS Rpt to DOE	8.1.01.54.02.22	11/19/96	11/19/96		4
31A55083	Q1 Submit X-749/120 Draft Final CMS Rpt to Agencies	8.1.01.54.02.22	12/15/96	12/15/96		4
31A55086	Q1 Receive OEPA Cmnts X-749/120 Draft Final CMS Rpt	8.1.01.54.02.22	1/5/97	1/5/97		4
31A55090	Q1 Receive Public Cmnts X-749/120 Draft Final CMS Rpt	8.1.01.54.02.22	2/25/97	2/25/97		4
31A55098	Q1 Receive OEPA Approval X-749/120 Final CMS Rpt	8.1.01.54.02.22	4/22/97	4/22/97		4
31A55099	Q1 Receive USEPA Approval X-749/120 Final CMS Rpt	8.1.01.54.02.22	4/22/97	4/22/97		4
31A55270	Q1 Receive OEPA Cmnts to X-749/120 Draft CMI Work Plan	8.1.01.54.02.10	7/31/97	7/31/97		4
31A55275	Q1 Receive USEPA Cmnts to X-749/120 Draft CMI Work Plan	8.1.01.54.02.10	7/16/97	7/16/97		4
31A55330	Q1 Receive OEPA Approval X-749/120 Final CMI Work Plan	8.1.01.54.02.10	9/24/97	9/24/97		4
31A55335	Q1 Receive USEPA Approval X-749/120 Final CMI Work Plan	8.1.01.54.02.10	9/24/97	9/24/97		4
31A55081	Q1 Receive Draft CMS Rpt with DOE Cmnts incorporated from Sub.	8.1.01.54.02.22	12/10/96	12/10/96		4

31A55041	Q1 Request Regulatory Date Extension on Drft Fnl CMS Rpt Submit.	5/5/95	8.1.01.54.02.22	5/7/95	5/7/95	5/7/95	5/7/95	5/7/95
31A55040	Q1 Deliver X-749/120 Preliminary Draft Final CMS Rpt to DOE		8.1.01.54.02.22	9/16/95	9/16/95	9/16/95	9/16/95	9/16/95
31A55045	Q1 Submit X-749/120 Preliminary Draft Final CMS Rpt to Agencies		8.1.01.54.02.22	9/30/95	9/30/95	9/30/95	9/30/95	9/30/95
31A54130	Q1 Start Title II Design X-749/120 Phase 2 Pilot Project		8.1.01.54.03.02.20	2/17/95	2/17/95	2/17/95	2/17/95	2/17/95
31A54157	Q1 Start X-749/120 Phase 3 Pilot Project Title II Dsgn		8.1.01.54.03.03.20	5/22/95	5/22/95	5/22/95	5/22/95	5/22/95
31A54101	Q1 Start Title II Design X-749/120 Phase 1 Pilot Project		8.1.01.54.03.01.20	2/17/95	2/17/95	2/17/95	2/17/95	2/17/95
31A54115	Q1 Issue X-749/120 Phase 1 Pilot Project CFC Pkg to MK-F		8.1.01.54.03.01.20	5/30/95	5/30/95	5/30/95	5/30/95	5/30/95
31A54172	Q1 Issue X-749/120 Pilot Project Phase 3 CFC Pkg to MKF		8.1.01.54.03.03.20	8/15/95	8/15/95	8/15/95	8/15/95	8/15/95
31A54147	Q1 Issue X-749/120 Phase 2 Pilot Project CFC to MK-F		8.1.01.54.03.02.20	7/14/95	7/14/95	7/14/95	7/14/95	7/14/95
31A54144	Q1 Issue Building Procurement to MK-F	6/16/95	8.1.01.54.03.02.24	6/16/95	6/16/95	6/16/95	6/16/95	6/16/95
31A54570	Q1 Deliver X-749/120 Pilot Project Initial Operational Report		8.1.01.54.03.04.42	5/14/96	5/14/96			4
31A54173	Q1 Issue X-749/120 Pilot Project Secondary Phase 3 CFC Pkg to MK-		8.1.01.54.03.03.20	9/12/95	9/12/95	9/12/95	9/12/95	9/12/95
31A54597	Q1 Deliver X-749/120 Pilot Project Final Operational Rpt to DOE		8.1.01.54.03.04.42	10/27/96	10/27/96			4
31A54177	Q1 Bids due on X-749/120 Phase 3 Pilot Project		8.1.01.54.03.03.24	10/10/95	10/10/95			4
31A54179	Q1 Evaluation of X-749/120 Phase 3 Pilot Project Bids		8.1.01.54.03.03.24	10/11/95	10/11/95			4
31A54181	Q1 Notice of Contract Award on X-749/120 Phase 3 Pilot Project	12/6/95	8.1.01.54.03.03.24	12/5/95	12/5/95			4
31A51340	Q1 Start Remedial Design X-749/120	2/1/97	8.1.01.54.04.20	2/1/97	2/1/97			4
31A51400	Q1 Deliver X-749/120 90% Design Package to DOE		8.1.01.54.04.20	5/28/97	5/28/97			4
31A51435	Q1 Submit X-749/120 CFC Package to Agencies		8.1.01.54.04.20	6/29/97	6/29/97			4
31A51470	Q1 Receive OEPA Approval X-749/120 CFC Package		8.1.01.54.04.20	10/28/97	10/28/97			4
31A51475	Q1 Receive USEPA Approval X-749/120 CFC Package		8.1.01.54.04.20	10/28/97	10/28/97			4
31A51485	Q1 Award X-749/120 Remedial Action Contract		8.1.01.54.04.24	11/9/97	11/9/97			4
31A57235	Q1 Receive OEPA Cmnts to X-231A Draft CMI Work Plan		8.1.01.56.02.10	6/2/98	6/2/98			4
31A57240	Q1 Receive USEPA Cmnts to X-231A Draft CMI Work Plan		8.1.01.56.02.10	6/2/98	6/2/98			4
31A57295	Q1 Receive OEPA Approval X-231A Final CMI Work Plan		8.1.01.56.02.10	10/30/98	10/30/98			4
31A57297	Q1 Receive USEPA Approval X-231A Final CMI Work Plan		8.1.01.56.02.10	10/30/98	10/30/98			4
31A57420	Q1 Receive OEPA Cmnts X-231A Draft CMS Report		8.1.01.56.02.22	5/27/97	5/27/97			4
31A57425	Q1 Receive USEPA Cmnts X-231A Draft CMS Report		8.1.01.56.02.22	5/27/97	5/27/97			4
31A57440	Q1 Deliver X-231A Draft Final CMS Report to DOE		8.1.01.56.02.22	6/26/97	6/26/97			4
31A57455	Q1 Submit X-231A Draft Final CMS Report to Agencies		8.1.01.56.02.22	8/14/97	8/14/97			4
31A57470	Q1 Receive OEPA Cmnts to X-231A Draft Final CMS Report		8.1.01.56.02.22	9/13/97	9/13/97			4
31A57471	Q1 Receive USEPA Cmnts to X-231A Draft Final CMS Report		8.1.01.56.02.22	9/13/97	9/13/97			4
31A57480	Q1 Receive Public Cmnts to X-231A Draft Final CMS Report		8.1.01.56.02.22	11/24/97	11/24/97			4
31A57496	Q1 Receive OEPA Approval X-231A Final CMS Report		8.1.01.56.02.22	3/4/98	3/4/98			4
31A57498	Q1 Receive USEPA Approval X-231A Final CMS Report		8.1.01.56.02.22	3/4/98	3/4/98			4
31A24301	Q1 Start X-231A Soil Title I/II Design	1/25/00	8.1.01.56.04.20	1/25/00	1/25/00			4
31A24350	Q1 Deliver X-231A Soil 90% Design Package to DOE		8.1.01.56.04.20	5/23/00	5/23/00			4
31A24390	Q1 Submit X-231A Soil CFC Package to Agencies		8.1.01.56.04.20	6/24/00	6/24/00			4
31A24425	Q1 Receive OEPA Approval X-231A Soil CFC Package		8.1.01.56.04.20	10/23/00	10/23/00			4
31A24430	Q1 Receive USEPA Approval X-231A Soil CFC Package		8.1.01.56.04.20	10/23/00	10/23/00			4
31A24505	Q1 Deliver X-231A Soil Construction Certification Rpt to D		8.1.01.56.04.28	8/6/01	8/6/01			4
31A24520	Q1 Submit X-231A Soil ion Certification Rpt to DOE		8.1.01.56.04.28	9/5/01	9/5/01			4
31A24440	Q1 Award X-231A Soil Remedial Action Contract		8.1.01.56.04.24	11/4/00	11/4/00			4
31A21235	Q1 Receive OEPA Cmnts to X-231B Draft CMI Work Plan		8.1.01.56.06.10	5/16/98	5/16/98			4
31A21240	Q1 Receive USEPA Cmnts to X-231B Draft CMI Work Plan		8.1.01.56.06.10	5/16/98	5/16/98			4
31A21295	Q1 Receive OEPA Approval X-231B Final CMI Work Plan		8.1.01.56.06.10	10/13/98	10/13/98			4
31A21297	Q1 Receive USEPA Approval X-231B Final CMI Work Plan		8.1.01.56.06.10	10/13/98	10/13/98			4
31A21420	Q1 Receive OEPA Cmnts X-231B Draft CMS Report		8.1.01.56.06.22	3/30/97	3/30/97			4
31A21425	Q1 Receive USEPA Cmnts X-231B Draft CMS Report		8.1.01.56.06.22	3/30/97	3/30/97			4
31A21440	Q1 Deliver X-231B Draft Final CMS Report to DOE		8.1.01.56.06.22	4/29/97	4/29/97			4
31A21455	Q1 Submit X-231B Draft Final CMS Report to Agencies		8.1.01.56.06.22	6/17/97	6/17/97			4
31A21470	Q1 Receive OEPA Cmnts to X-231B Draft Final CMS Report		8.1.01.56.06.22	8/1/97	8/1/97			4
31A21496	Q1 Receive OEPA Approval X-231B Final CMS Report		8.1.01.56.06.22	1/31/98	1/31/98			4
31A21498	Q1 Receive USEPA Approval X-231B Final CMS Report		8.1.01.56.06.22	1/31/98	1/31/98			4
31A21480	Q1 Receive Public Cmnts to X-231B Draft Final CMS Report		8.1.01.56.06.22	10/30/97	10/30/97			4
31A21471	Q1 Receive USEPA Cmnts to X-231B Draft Final CMS Report		8.1.01.56.06.22	8/1/97	8/1/97			4
31A22301	Q1 Start X-231B Soil Title I/II Design	10/21/00	8.1.01.56.08.20	10/21/00	10/21/00			4
31A22350	Q1 Deliver X-231B Soil 90% Design Package to DOE		8.1.01.56.08.20	2/17/01	2/17/01			4
31A22390	Q1 Submit X-231B Soil CFC Package to Agencies		8.1.01.56.08.20	3/21/01	3/21/01			4
31A22425	Q1 Receive OEPA Approval X-231B Soil CFC Package		8.1.01.56.08.20	7/20/01	7/20/01			4
31A22430	Q1 Receive USEPA Approval X-231B Soil CFC Package		8.1.01.56.08.20	7/20/01	7/20/01			4
31A22505	Q1 Deliver X-231B Soil Construction Certification Rpt to DOE		8.1.01.56.08.28	5/3/02	5/3/02			4
31A22520	Q1 Submit X-231B Soil Construction Certification Rpt to OEPA		8.1.01.56.08.28	6/2/02	6/2/02			4
31A22440	Q1 Award X-231B Soil Remedial Action Contract		8.1.01.56.08.24	8/1/01	8/1/01			4
31A56235	Q1 Receive OEPA Cmnts to 5-Unit Groundwater Draft CMI WP		8.1.01.56.10.10	4/20/98	4/20/98			4
31A56240	Q1 Receive USEPA Cmnts to 5-Unit Groundwater Draft CMI WP		8.1.01.56.10.10	4/20/98	4/20/98			4
31A56295	Q1 Receive OEPA Approval 5-Unit Groundwater Final CMI WP		8.1.01.56.10.10	9/17/98	9/17/98			4
31A56297	Q1 Receive USEPA Approval 5-Unit Groundwater Final CMI WP		8.1.01.56.10.10	9/17/98	9/17/98			4
31A56420	Q1 Receive OEPA Cmnts 5-Unit Groundwater Draft CMS Rpt		8.1.01.56.10.22	12/27/96	12/27/96			4
31A56425	Q1 Receive USEPA Cmnts 5-Unit Groundwater Draft CMS Rpt		8.1.01.56.10.22	12/27/96	12/27/96			4
31A56440	Q1 Deliver 5-Unit Groundwater Draft Final CMS Rpt to DOE		8.1.01.56.10.22	1/26/97	1/26/97			4
31A56455	Q1 Submit 5-Unit Groundwater Draft Final CMS Rpt to Agencies	7/3/96	8.1.01.56.10.22	3/16/97	3/16/97			4
31A56470	Q1 Receive OEPA Cmnts to 5-Unit Groundwater Draft Final CMS Rpt		8.1.01.56.10.22	4/30/97	4/30/97			4
31A56496	Q1 Receive OEPA Approval 5-Unit Groundwater Final CMS Rpt		8.1.01.56.10.22	12/6/97	12/6/97			4
31A56498	Q1 Receive USEPA Approval 5-Unit Groundwater Final CMS Rpt		8.1.01.56.10.22	12/6/97	12/6/97			4
31A56480	Q1 Receive Public Cmnts to 5-Unit Groundwater Draft Final CMS Rpt		8.1.01.56.10.22	7/20/97	7/20/97			4
31A56471	Q1 Receive USEPA Cmnts to 5-Unit Groundwater Draft Final CMS Rpt		8.1.01.56.10.22	4/30/97	4/30/97			4
31A56305	Completion of the Groundwater Modeling Study	6/26/96	8.1.01.56.10.22	6/26/96	6/26/96			4
31A59301	Q1 Start 5-Unit Groundwater Title I/II Design	10/1/00	8.1.01.56.12.20	10/1/00	10/1/00			4
31A59350	Q1 Deliver 5-Unit Groundwater 90% Design Package to DOE		8.1.01.56.12.20	1/28/01	1/28/01			4
31A59390	Q1 Submit 5-Unit Groundwater CFC Package to Agencies		8.1.01.56.12.20	3/1/01	3/1/01			4
31A59425	Q1 Receive OEPA Approval 5-Unit Groundwater CFC Package		8.1.01.56.12.20	6/30/01	6/30/01			4
31A59430	Q1 Receive USEPA Approval 5-Unit Groundwater CFC Package		8.1.01.56.12.20	6/30/01	6/30/01			4
31A59505	Q1 Deliver 5-Unit Groundwater Construction Certification Rpt to D		8.1.01.56.12.28	4/13/02	4/13/02			4
31A59520	Q1 Submit 5-Unit GW Construction Certification Rpt to DOE		8.1.01.56.12.28	5/13/02	5/13/02			4
31A59440	Q1 Award 5-Unit Groundwater Remedial Action Contract		8.1.01.56.12.24	7/12/01	7/12/01			4
31A12420	Q1 Receive OEPA Cmnts to PKLF Draft CMS Rpt		8.1.01.58.02.22	10/25/94	10/25/94			4
31A12425	Q1 Receive USEPA Cmnts PKLF Draft CMS Rpt		8.1.01.58.02.22	11/7/94	11/7/94			4
31A12440	Q1 Deliver PKLF Draft Final CMS Rpt to DOE		8.1.01.58.02.22	1/13/95	1/13/95			4
31A12455	Q1 Submit PKLF Draft Final CMS Rpt to Agencies		8.1.01.58.02.22	2/10/95	2/10/95			4
31A12470	Q1 Receive OEPA Comments to PKLF Draft Final CMS Rpt		8.1.01.58.02.22	3/24/95	3/24/95			4
31A12485	Q1 Receive OEPA Approval of PKLF CMS Report		8.1.01.58.02.22	8/8/95	8/8/95			4
31A12480	Q1 Receive Public Cmnts to PKLF Draft Final CMS Rpt		8.1.01.58.02.22	5/12/95	5/12/95			4
31A12235	Q1 Receive OEPA Cmnts to PKLF Draft CMI WP		8.1.01.58.02.10	8/21/96	8/21/96			4
31A12240	Q1 Receive USEPA Cmnts to PKLF Draft CMI WP		8.1.01.58.02.10	8/21/96	8/21/96			4
31A12295	Q1 Receive OEPA Approval PKLF Final CMI Work Plan		8.1.01.58.02.10	1/18/97	1/18/97			4
31A12297	Q1 Receive USEPA Approval PKLF Final CMI Work Plan		8.1.01.58.02.10	1/18/97	1/18/97			4
31A12471	Q1 Receive USEPA Comments to PKLF Draft Final CMS Report		8.1.01.58.02.22	4/3/95	4/3/95			4
31A12490	Q1 Receive USEPA Approval of PKLF CMS Report		8.1.01.58.02.22	8/8/95	8/8/95			4
31A12500	Q1 Receive CMS Decision Document/Record of Decision	2/20/96	8.1.01.58.02.22	2/19/96	2/19/96			4
31A12510	Q1 Receive Funding for PKLF CMI Work Plan	2/18/96	8.1.01.58.02.22	2/19/96	2/19/96			4
31A46301	Q1 Start Peter Kiewit Landfill Title I/II Design	10/1/00	8.1.01.58.04.20	10/1/00	10/1/00			4
31A46350	Q1 Deliver Peter Kiewit Landfill 90% Design Package to DOE		8.1.01.58.04.20	1/28/01	1/28/01			4
31A46390	Q1 Submit Peter Kiewit Landfill CFC Package to Agencies		8.1.01.58.04.20	3/1/01	3/1/01			4
31A46425	Q1 Receive OEPA Approval Peter Kiewit Landfill CFC Package		8.1.01.58.04.20	6/30/01	6/30/01			4
31A46430	Q1 Receive USEPA Approval Peter Kiewit Landfill CFC Package		8.1.01.58.04.20	6/30/01	6/30/01			4
31A46505	Q1 Deliver PKLF Construction Certification Rpt to DOE		8.1.01.58.04.28	4/13/02	4/13/02			4
31A46520	Q1 Submit PKLF Construction Certification Rpt to DOE		8.1.01.58.04.28	5/13/02	5/13/02			4
31A46440	Q1 Award Peter Kiewit Landfill Remedial Action Contract		8.1.01.58.04.24	7/12/01	7/12/01			4
31A60235	Q1 Receive OEPA Comments to X-600A / X-621 Draft CMI WP		8.1.01.60.02.10	10/4/06	10/4/06			4
31A60240	Q1 Receive USEPA Comments to X-600A / X-621 Draft CMI WP		8.1.01.60.02.10	10/4/06	10/4/06			4
31A60295	Q1 Receive OEPA Approval X-600A / X-621 Final CMI WP		8.1.01.60.02.10	3/3/07	3/3/07			4
31A60297	Q1 Receive USEPA Approval X-600A / X-621 Final CMI WP		8.1.01.60.02.10	3/3/07	3/3/07			4
31A60404	Q1 Deliver X-600A / X-621 Draft CMS Rpt to DOE		8.1.01.60.02.22	12/10/04	12/10/04			4
31A60412	Q1 Submit X-600A / X-621 Draft CMS Rpt to Agencies		8.1.01.60.02.22	1/28/05	1/28/05			4
31A60418	Q1 Receive OEPA Comments to X-600A / X-621 Draft CMS Repo		8.1.01.60.02.22	4/28/05	4/28/05			4
31A60420	Q1 Receive USEPA Comments to X-600A / X-621 Draft CMS Rep		8.1.01.60.02.22	4/28/05	4/28/05			4
31A60440	Q1 Deliver X-600A / X-621 Draft Final CMS Rpt to DOE		8.1.01.60.02.22	6/27/05				

31A68295	Q1 Receive OEPA Approval X-710 Soil Final CMI WP	8.1.01.60.18.10	4/1/07 4/1/07	4
31A68297	Q1 Receive USEPA Approval X-710 Soil Final CMI WP	8.1.01.60.18.10	4/1/07 4/1/07	4
31A68404	Q1 Deliver X-710 Soil Draft CMS Rpt to DOE	8.1.01.60.18.22	1/8/05 1/8/05	4
31A68412	Q1 Submit X-710 Soil Draft CMS Rpt to Agencies	8.1.01.60.18.22	2/26/05 2/26/05	4
31A68418	Q1 Receive OEPA Comments to X-710 Soil Draft CMS Repo	8.1.01.60.18.22	5/27/05 5/27/05	4
31A68420	Q1 Receive USEPA Comments to X-710 Soil Draft CMS Rep	8.1.01.60.18.22	5/27/05 5/27/05	4
31A68440	Q1 Deliver X-710 Soil Draft Final CMS Rpt to DOE	8.1.01.60.18.22	7/26/05 7/26/05	4
31A68455	Q1 Submit X-710 Soil Draft Final CMS Rpt to Agencies	8.1.01.60.18.22	9/13/05 9/13/05	4
31A68470	Q1 Receive OEPA Comments to X-710 Soil Draft Final CMS Repo	8.1.01.60.18.22	12/12/05 12/12/05	4
31A68471	Q1 Receive USEPA Comments to X-710 Soil Draft Final CMS Rep	8.1.01.60.18.22	12/12/05 12/12/05	4
31A68480	Q1 Receive Public Comments to X-710 Soil Draft Final CMS Re	8.1.01.60.18.22	3/12/06 3/12/06	4
31A68496	Q1 Receive OEPA Approval X-710 Soil Final CMS Report	8.1.01.60.18.22	6/20/06 6/20/06	4
31A68498	Q1 Receive USEPA Approval X-710 Soil Final CMS Report	8.1.01.60.18.22	6/20/06 6/20/06	4
31A69301	Q1 Start X-710 Title I/II Design	8.1.01.60.20.20	4/2/07 4/2/07	4
31A69425	Q1 Receive OEPA Approval X-710 CFC Package	8.1.01.60.20.20	12/30/07 12/30/07	4
31A69430	Q1 Receive USEPA Approval X-710 CFC Package	8.1.01.60.20.20	12/30/07 12/30/07	4
31A69505	Q1 Deliver X-710 Construction Certification Rpt to D	8.1.01.60.20.28	10/12/08 10/12/08	4
31A69520	Q1 Submit X-710 ion Certification Rpt to DOE	8.1.01.60.20.28	11/11/08 11/11/08	4
31A70235	Q1 Receive OEPA Comments to X-760 Draft CMI WP	8.1.01.60.22.10	11/2/07 11/2/07	4
31A70240	Q1 Receive USEPA Comments to X-760 Draft CMI WP	8.1.01.60.22.10	11/2/07 11/2/07	4
31A70295	Q1 Receive OEPA Approval X-760 Final CMI WP	8.1.01.60.22.10	3/31/08 3/31/08	4
31A70297	Q1 Receive USEPA Approval X-760 Final CMI WP	8.1.01.60.22.10	3/31/08 3/31/08	4
31A70404	Q1 Deliver X-760 Draft CMS Rpt to DOE	8.1.01.60.22.22	1/8/06 1/8/06	4
31A70412	Q1 Submit X-760 Draft CMS Rpt to Agencies	8.1.01.60.22.22	2/26/06 2/26/06	4
31A70418	Q1 Receive OEPA Comments to X-760 Draft CMS Repo	8.1.01.60.22.22	5/27/06 5/27/06	4
31A70420	Q1 Receive USEPA Comments to X-760 Draft CMS Rep	8.1.01.60.22.22	5/27/06 5/27/06	4
31A70440	Q1 Deliver X-760 Draft Final CMS Rpt to DOE	8.1.01.60.22.22	7/26/06 7/26/06	4
31A70455	Q1 Submit X-760 Draft Final CMS Rpt to Agencies	8.1.01.60.22.22	9/13/06 9/13/06	4
31A70470	Q1 Receive OEPA Comments to X-760 Draft Final CMS Repo	8.1.01.60.22.22	12/12/06 12/12/06	4
31A70471	Q1 Receive USEPA Comments to X-760 Draft Final CMS Rep	8.1.01.60.22.22	12/12/06 12/12/06	4
31A70480	Q1 Receive Public Comments to X-760 Draft Final CMS Re	8.1.01.60.22.22	3/12/07 3/12/07	4
31A70496	Q1 Receive OEPA Approval X-760 Final CMS Report	8.1.01.60.22.22	6/20/07 6/20/07	4
31A70498	Q1 Receive USEPA Approval X-760 Final CMS Report	8.1.01.60.22.22	6/20/07 6/20/07	4
31A71301	Q1 Start X-760 Title I/II Design	8.1.01.60.24.20	4/1/08 4/1/08	4
31A71425	Q1 Receive OEPA Approval X-760 CFC Package	8.1.01.60.24.20	12/29/08 12/29/08	4
31A71430	Q1 Receive USEPA Approval X-760 CFC Package	8.1.01.60.24.20	12/29/08 12/29/08	4
31A71505	Q1 Deliver X-760 Construction Certification Rpt to D	8.1.01.60.24.28	10/12/09 10/12/09	4
31A71520	Q1 Submit X-760 ion Certification Rpt to DOE	8.1.01.60.24.28	11/11/09 11/11/09	4
32B06020	Q2 Submit Draft RFI Work Plan to Agencies	8.1.02.50.02.06	2/19/92 2/19/92 2/19/92 2/19/92	92
32B06025	Q2 Receive Agencies Cmnts to Draft RFI WP	8.1.02.50.02.06	6/25/92 6/25/92 6/25/92 6/25/92	92
32B06035	Q2 Submit Quadwide RFI Final Work Plan to Agencies	8.1.02.50.02.06	7/25/92 7/25/92 7/25/92 7/25/92	92
32B06065	Q2 Submit Phase II Draft RFI WP to Agencies	8.1.02.50.02.06	6/3/93 6/3/93 6/3/93 6/3/93	93
32B06070	Q2 Receive OEPA Approval Phase II Draft RFI WP	8.1.02.50.02.06	10/4/93 10/4/93 10/4/93 10/4/93	93
32B06080	Q2 Receive USEPA Cmnts Phase II Draft RFI WP	8.1.02.50.02.06	12/3/93 12/3/93 12/3/93 12/3/93	93
32B06085	Q2 Receive USEPA Approval Phase II Draft RFI WP	8.1.02.50.02.06	1/4/94 1/4/94 1/4/94 1/4/94	94
32B06205	Q2 Receive OEPA Approval Phase II Final RFI Rpt	8.1.02.50.02.08	4/22/97 4/22/97	4
32B06207	Q2 Receive USEPA Approval Phase II Final RFI Rpt	8.1.02.50.02.08	4/22/97 4/22/97	4
32B07193	Q2 Submit Final CMS Work Plan to USEPA	8/28/98 8.1.02.50.04.06	10/1/93 10/1/93 10/1/93 10/1/93	98
32B07105	Q2 Submit Draft CMS WP to Agencies	8.1.02.50.04.06	5/15/92 5/15/92 5/15/92	4
32B07115	Q2 Receive Agencies Comments to Draft CMS WP	8.1.02.50.04.06	8/2/92 8/2/92 8/2/92	4
32B07125	Q2 Submit Revised Draft CMS WP to Agencies	8.1.02.50.04.06	10/2/92 10/2/92 10/2/92	4
32B07135	Q2 Receive Agencies Cmnts to Revised Draft CMS WP	8.1.02.50.04.06	12/25/92 12/25/92 12/25/92	4
32B07145	Q2 Submit Draft Final CMS WP to Agencies	8.1.02.50.04.06	1/25/93 1/25/93 1/25/93	4
32B07160	Q2 Receive OEPA Cmnts to Draft Final CMS WP	8.1.02.50.04.06	5/14/93 5/14/93 5/14/93	4
32B07185	Q2 Receive USEPA Cmnts to Draft Final CMS WP	8.1.02.50.04.06	7/12/93 7/12/93 7/12/93	4
32B07175	Q2 Submit Final CMS WP to OEPA	8.1.02.50.04.06	6/11/93 6/11/93 6/11/93	4
32B07190	Q2 Receive OEPA Approval Final CMS Work Plan	8.1.02.50.04.06	8/31/93 8/31/93 8/31/93	4
32B07197	Q2 Receive USEPA Approval Final CMS Work Plan	8.1.02.50.04.06	11/1/93 11/1/93 11/1/93	4
32B07235	Q2 Receive OEPA Cmnts to Draft CMS Rpt	8.1.02.50.04.08	7/19/94 7/19/94 7/19/94 7/19/94	94
32B07245	Q2 Receive USEPA Cmnts to CMS Draft Rpt	8.1.02.50.04.08	8/11/94 8/11/94 8/11/94 8/11/94	94
32B07265	Q2 Deliver Draft Final CMS Rpt to DOE	8.1.02.50.04.08	9/17/04 9/17/04	4
32B07270	Q2 Submit Draft Final CMS Rpt to Agencies	8.1.02.50.04.08	11/5/04 11/5/04	4
32B07290	Q2 Receive OEPA Cmnts to Draft Final CMS Rpt	8.1.02.50.04.08	2/3/05 2/3/05	4
32B07310	Q2 Receive Public Comments to Draft Final CMS Rpt	8.1.02.50.04.08	5/4/05 5/4/05	4
32B07375	Q2 Receive OEPA Approval Final CMS Report	8.1.02.50.04.08	8/17/05 8/17/05	4
32B07377	Q2 Receive USEPA Approval Final CMS Report	8.1.02.50.04.08	8/17/05 8/17/05	4
32B07256	Q2 Resolution of Cmnts by Agencies & DOE	8.1.02.50.04.08	12/22/94 12/22/94 12/22/94 12/22/94	94
32B07291	Q2 Receive USEPA Cmnts to Draft Final CMS Rpt	8.1.02.50.04.08	2/3/05 2/3/05	4
32B07435	Q2 Receive OEPA Comments to Quadwide Draft CMI WP	8.1.02.50.04.12	12/30/05 12/30/05	4
32B07440	Q2 Receive USEPA Comments to Quadwide Draft CMI WP	8.1.02.50.04.12	12/30/05 12/30/05	4
32B07505	Q2 Receive OEPA Approval Quadwide Final CMI WP	8.1.02.50.04.12	5/29/06 5/29/06	4
32B07507	Q2 Receive USEPA Approval Quadwide Final CMI WP	8.1.02.50.04.12	5/29/06 5/29/06	4
32B52112	Q2 Receive OEPA Cmnts to X-701B Draft CMS Rpt	8.1.02.52.02.22	4/13/94 4/13/94 4/13/94 4/13/94	94
32B52115	Q2 Receive USEPA Cmnts to X-701B Drft CMS Rpt	8.1.02.52.02.22	4/22/94 4/22/94 4/22/94 4/22/94	94
32B52122	Q2 Submit X-701B Draft Closure Plan to Agencies	8.1.02.52.02.22	10/31/94 10/31/94 10/31/94 10/31/94	94
32B52126	Q2 X-701B Pond Drainage/Pond Characterization	2/20/96 8.1.02.52.02.22	2/20/96 2/20/96	4
32B52127	Q2 X-701B Surfactant Demo/Study	8/16/96 8.1.02.52.02.22	8/16/96 8/16/96	4
32B52129	Q2 X-701B Groundwater Recirculation Test	9/30/96 8.1.02.52.02.22	9/30/96 9/30/96	4
32B52131	Q2 Receive Agencies Approval of Integrated CMS/Closure Work Plan	4/7/96 8.1.02.52.02.22	4/7/96 4/7/96	4
32B52136	Q2 Submit X-701B Final CMS Closure Work Plan to Agencies	8.1.02.52.02.22	12/21/96 12/21/96	4
32B52155	Q2 Deliver X-701B GW Draft Final CMS Rpt to DOE	8.1.02.52.02.22	5/14/97 5/14/97	4
32B52170	Q2 Submit X-701B GW Draft Final CMS Rpt to Agencies	8.1.02.52.02.22	6/11/97 6/11/97	4
32B52195	Q2 Receive OEPA Comments X-701B Draft Final CMS Rpt	8.1.02.52.02.22	7/11/97 7/11/97	4
32B52200	Q2 Receive Public Comments X-701B Draft Final CMS Rpt	8.1.02.52.02.22	8/10/97 8/10/97	4
32B52245	Q2 Receive OEPA Approval X-701B GW Final CMS Rpt	8.1.02.52.02.22	11/1/97 11/1/97	4
32B52250	Q2 Receive USEPA Approval X-701B GW Final CMS Rpt	8.1.02.52.02.22	11/1/97 11/1/97	4
32B52335	Q2 Receive OEPA Cmnts to X-701B Draft CMI Work Plan	8.1.02.52.02.10	3/16/98 3/16/98	4
32B52340	Q2 Receive USEPA Cmnts to X-701B Draft CMI Work Plan	8.1.02.52.02.10	3/16/98 3/16/98	4
32B52400	Q2 Receive OEPA Approval X-701B GW Final CMI Work Plan	8.1.02.52.02.10	8/13/98 8/13/98	4
32B52405	Q2 Receive USEPA Approval X-701B GW Final CMI Work Plan	8.1.02.52.02.10	8/13/98 8/13/98	4
32B53301	Q2 Start X-701B Groundwater Title I/II Design	7/4/98 8.1.02.52.04.20	7/4/98 7/4/98	4
32B53350	Q2 Deliver X-701B Groundwater 90% Design Package to DOE	8.1.02.52.04.20	10/31/98 10/31/98	4
32B53390	Q2 Submit X-701B Groundwater CFC Package to Agencies	8.1.02.52.04.20	12/2/98 12/2/98	4
32B53425	Q2 Receive OEPA Approval X-701B Groundwater CFC Package	8.1.02.52.04.20	4/2/99 4/2/99	4
32B53430	Q2 Receive USEPA Approval X-701B Groundwater CFC Package	8.1.02.52.04.20	4/2/99 4/2/99	4
32B53505	Q2 Deliver X-701B Groundwater Construction Certificat Rpt to DOE	8.1.02.52.04.28	12/1/00 12/1/00	4
32B53520	Q2 Submit X-701B Groundwater Construnctn Certification Rpt to OEPA	8.1.02.52.04.28	12/31/00 12/31/00	4
32B53440	Q2 Award X-701B Groundwater Remedial Action Contract	8.1.02.52.04.24	4/14/99 4/14/99	4
32BA2136	Q2 Submit X-701B Final CMS Closure Work Plan to Agencies	8.1.02.52.06.22	1/8/96 1/8/96	4
32BA2155	Q2 Deliver X-701B Soil Draft Final CMS Rpt to DOE	8.1.02.52.06.22	5/7/96 5/7/96	4
32BA2170	Q2 Submit X-701B Soil Draft Final CMS Rpt to Agencies	8.1.02.52.06.22	6/25/96 6/25/96	4
32BA2195	Q2 Receive OEPA Comments X-701B Draft Final CMS Rpt	8.1.02.52.06.22	9/23/96 9/23/96	4
32BA2200	Q2 Receive Public Comments X-701B Draft Final CMS Rpt	8.1.02.52.06.22	11/22/96 11/22/96	4
32BA2245	Q2 Receive OEPA Approval X-701B Final CMS Rpt	8.1.02.52.06.22	3/16/97 3/16/97	4
32BA2250	Q2 Receive USEPA Approval X-701B Final CMS Rpt	8.1.02.52.06.22	3/16/97 3/16/97	4
32BA2335	Q2 Receive OEPA Cmnts to X-701B Draft CMI Work Plan	8.1.02.52.06.10	7/29/97 7/29/97	4
32BA2340	Q2 Receive USEPA Cmnts to X-701B Draft CMI Work Plan	8.1.02.52.06.10	7/29/97 7/29/97	4
32BA2400	Q2 Receive OEPA Approval X-701B Final CMI Work Plan	8.1.02.52.06.10	12/26/97 12/26/97	4
32BA2405	Q2 Receive USEPA Approval X-701B Final CMI Work Plan	8.1.02.52.06.10	12/26/97 12/26/97	4
32B55301	Q2 Start X-701B Soil Title I/II Design	12/27/97 8.1.02.52.08.20	12/27/97 12/27/97	4
32B55350	Q2 Deliver X-701B Soil 90% Design Package to DOE	8.1.02.52.08.20	4/25/98 4/25/98	4
32B55390	Q2 Submit X-701B Soil CFC Package to Agencies	8.1.02.52.08.20	5/27/98 5/27/98	4
32B55425	Q2 Receive OEPA Approval X-701B Soil CFC Package	8.1.02.52.08.20	9/25/98 9/25/98	4
32B55430	Q2 Receive USEPA Approval X-701B Soil CFC Package	8.1.02.52.08.20	9/25/98 9/25/98	4
32B55505	Q2 Deliver X-701B Soil Construction Certification Rpt to DOE	8.1.02.52.08.28	7/9/99 7/9/99	4
32B55520	Q2 Submit X-701B Soil Construction Certification Rpt to OEPA	8.1.02.52.08.28	8/8/99 8/8/99	4
32B55440	Q2 Award X-701B Soil Remedial Action Contract	8.1.02.52.08.24	10/7/98 10/7/98	4
32B56235	Q2 Receive OEPA Comments to X-744Y/G Soil Draft CMI WP	8.1.02.52.10.10	1/2/99 1/2/99	4
32B56240	Q2 Receive USEPA Comments to X-744Y/G Soil Draft CMI WP	8.1.02.52.10.10	1/2/99 1/2/99	4
32B56295	Q2 Receive OEPA Approval X-744Y/G Soil Final CMI WP	8.1.02.52.10.10	6/1/99 6/1/99	4
32B56297	Q2 Receive USEPA Approval X-744Y/G Soil Final CMI WP	8.1.02.52.10.10	6/1/99 6/1/99	4
32B56440	Q2 Deliver X-744Y/G Soil Draft Final CMS Rpt to DOE	8.1.02.52.10.22	9/25/97 9/25/97	4
32B56455	Q2 Submit X-744Y/G Soil Draft Final CMS Rpt to Agencies	8.1.02.52.10.22	11/13/97 11/13/97	4
32B56470	Q2 Receive OEPA Comments to X-744Y/G Soil Draft Final CMS Repo	8.1.02.52.10.22	2/11/98 2/11/98	4
32B56496	Q2 Receive OEPA Approval X-744Y/G Soil Final CMS Report	8.1.02.52.10.22	8/20/98 8/20/98	4
32B56498	Q2 Receive USEPA Approval X-744Y/G Soil Final CMS Report	8.1.02.52.10.22	8/20/98 8/20/98	4
32B56480	Q2 Receive Public Comments to X-744Y/G Soil Draft Final CMS Re	8.1.02.52.10.22	5/12/98 5/12/98	4
32B56471	Q2 Receive USEPA Comments to X-744Y/G Soil Draft Final CMS Rep	8.1.02.52.10.22	2/11/98 2/11/98	4
32B56418	Q2 Receive OEPA Comments to X-744Y/G Soil Draft CMS Repo	8.1.02.52.10.22	7/27/97 7/27/97	4
32B56420	Q2 Receive USEPA Comments to X-744Y/G Soil Draft CMS Rep	8.1.02.52.10.22	7/27/97 7/27/97	4
32B61301	Q2 Start X-744Y/G Soil Title I/II Design	7/2/99 8.1.02.52.12.20	7/2/99 7/2/99	4

32B61350	Q2 Deliver X-744Y/G Soil 90% Design Package to DOE	8.1.02.52.12.20	10/29/99	4
32B61390	Q2 Submit X-744Y/G Soil CFC Package to Agencies	8.1.02.52.12.20	11/30/99	4
32B61425	Q2 Receive OEPA Approval X-744Y/G Soil CFC Package	8.1.02.52.12.20	3/30/00	4
32B61430	Q2 Receive USEPA Approval X-744Y/G Soil CFC Package	8.1.02.52.12.20	3/30/00	4
32B61505	Q2 Deliver X-744Y/G Soil Construction Certification Rpt to D	8.1.02.52.12.28	2/7/02	4
32B61520	Q2 Submit X-744Y/G Soil ion Certification Rpt to DOE	8.1.02.52.12.28	3/9/02	4
32B61440	Q2 Award X-744Y/G Soil Remedial Action Contract	8.1.02.52.12.24	4/11/00	4
32BJ7635	Q2 Receive OEPA Cmnts to X-230J7 Draft CMS Rpt	8.1.02.52.14.22	1/2/97	4
32BJ7640	Q2 Receive USEPA Cmnts to X-230J7 Draft CMS Rpt	8.1.02.52.14.22	1/2/97	4
32BJ7655	Q2 Deliver X-230J7 Draft Final CMS Rpt to DOE	8.1.02.52.14.22	1/26/97	4
32BJ7670	Q2 Submit X-230J7 Draft Final CMS Rpt to Agencies	8.1.02.52.14.22	3/5/97	4
32BJ7695	Q2 Receive Agencies Comments X-230J7 Draft Final CMS Rpt	8.1.02.52.14.22	4/4/97	4
32BJ7700	Q2 Receive Public Comments X-230J7 Draft Final CMS Rpt	8.1.02.52.14.22	5/4/97	4
32BJ7745	Q2 Receive OEPA Approval X-230J7 Final CMS Rpt	8.1.02.52.14.22	8/5/97	4
32BJ7750	Q2 Receive USEPA Approval X-230J7 Final CMS Rpt	8.1.02.52.14.22	8/5/97	4
32BJ7874	Q2 Receive OEPA Cmnts to X-230J7 Draft CMI Work Plan	8.1.02.52.14.10	11/3/97	4
32BJ7876	Q2 Receive USEPA Cmnts to X-230J7 Draft CMI Work Plan	8.1.02.52.14.10	11/3/97	4
32BJ7895	Q2 Receive OEPA Approval X-230J7 Final CMI Work Plan	8.1.02.52.14.10	4/18/98	4
32BJ7896	Q2 Receive USEPA Approval X-230J7 Final CMI Work Plan	8.1.02.52.14.10	4/18/98	4
32BJ7922	Q2 Submit X-230J7 Draft CMS/Closure Work Plan to Agencies	8.1.02.52.14.22	1/10/96	4
32BJ7931	Q2 Submit X-230J7 Draft CMS/Closure Work Plan to Agencies	8.1.02.52.14.22	3/4/96	4
32BJ7936	Q2 Submit X-230J7 Final CMS Closure Work Plan to Agencies	8.1.02.52.14.22	7/26/96	4
32B59301	Q2 Start X-230J7 Title I/II Design	8.1.02.52.16.20	10/1/01	4
32B59350	Q2 Deliver X-230J7 90% Design Package to DOE	8.1.02.52.16.20	1/28/02	4
32B59390	Q2 Submit X-230J7 CFC Package to Agencies	8.1.02.52.16.20	3/1/02	4
32B59425	Q2 Receive OEPA Approval X-230J7 CFC Package	8.1.02.52.16.20	6/30/02	4
32B59430	Q2 Receive USEPA Approval X-230J7 CFC Package	8.1.02.52.16.20	6/30/02	4
32B59505	Q2 Deliver X-230J7 Construction Certification Rpt to D	8.1.02.52.16.28	4/13/03	4
32B59520	Q2 Submit X-230J7 ion Certification Rpt to DOE	8.1.02.52.16.28	5/13/03	4
32B59440	Q2 Award X-230J7 Remedial Action Contract	8.1.02.52.16.24	7/12/02	4
32B12512	Q2 Receive OEPA Cmnts to X-705A/B Draft CMS Report	8.1.02.54.02.22	5/12/94	4
32B12515	Q2 Receive USEPA Cmnts to X-705A/B Draft CMS Report	8.1.02.54.02.22	5/20/94	4
32B12521	Q2 Submit X-705A/B Draft Final CMS Report to DOE	8.1.02.54.02.22	7/18/94	4
32B12530	Q2 Submit X-705A/B Draft Final CMS Report to Agencies	8.1.02.54.02.22	7/29/94	4
32B12542	Q2 Receive OEPA Cmnts X-705A/B Draft Final CMS Report	8.1.02.54.02.22	10/25/94	4
32B12545	Q2 Receive USEPA Cmnts X-705A/B Draft Final CMS Report	8.1.02.54.02.22	10/14/94	4
32B12135	Q2 Receive OEPA Cmnts to X-705A/B Draft CMI Work Plan	8.1.02.54.02.10	8/20/96	4
32B12140	Q2 Receive USEPA Cmnts to X-705A/B Draft CMI Work Plan	8.1.02.54.02.10	8/20/96	4
32B12195	Q2 Receive OEPA Approval X-705A/B Final CMI Work Plan	8.1.02.54.02.10	1/17/97	4
32B12197	Q2 Receive USEPA Approval X-705A/B Final CMI Work Plan	8.1.02.54.02.10	1/17/97	4
32B12585	Q2 Submit Addendum to X-705A/B Draft Final CMS Report to DOE	8.1.02.54.02.22	9/1/94	4
32B12597	Q2 Submit X-705A/B Draft Final CMS Rpt Addendum to Agencies	8.1.02.54.02.22	9/15/94	4
32B12600	Q2 Submit X-705A/B Draft Final Rev 1 CMS Rpt to Agencies	8.1.02.54.02.22	11/21/94	4
32B12621	Q2 Submit X-705A/B Draft Final R2 CMS Report to Agencies	8.1.02.54.02.22	1/26/95	4
32B12552	Q2 Receive USEPA Approval X-705A/B Draft Final CMS Rpt	8.1.02.54.02.22	2/15/95	4
32B12613	Q2 OEPA Approval of X-705A/B CMS Report	8.1.02.54.02.22	8/8/95	4
32B12616	Q2 OEPA Issue X-705A/B ROD	8.1.02.54.02.22	11/30/95	4
32B54200	Q2 Issue X-705A/B STD	8.1.02.54.04.20	12/22/95	4
32B54250	Q2 Submit X-705A/B 90% Design Package to DOE	8.1.02.54.04.20	3/2/96	4
32B54285	Q2 Submit X-705A/B CFC Package to Agencies	8.1.02.54.04.20	3/27/96	4
32B54305	Q2 Receive OEPA Cmnts to X-705A/B CFC Package	8.1.02.54.04.20	4/6/96	4
32B54310	Q2 Receive USEPA Cmnts to X-705A/B CFC Package	8.1.02.54.04.20	4/6/96	4
32B54320	Q2 Receive OEPA Approval X-705A/B CFC Package	8.1.02.54.04.20	4/8/96	4
32B54325	Q2 Receive USEPA Approval X-705A/B CFC Package	8.1.02.54.04.20	4/8/96	4
32B54900	Q2 Award X-705A/B Remedial Action Contract	8.1.02.54.04.24	5/26/96	4
32B54950	Q2 Deliver X-705A/B Construction Certification Rpt to DOE	8.1.02.54.04.28	10/30/96	4
32B54965	Q2 Submit X-705A/B Construction Certification Rpt to OEPA	8.1.02.54.04.28	11/29/96	4
32B54210	Q2 Complete X-705A/B Design Kickoff Meeting	8.1.02.54.04.20	1/3/96	4
32B62235	Q2 Receive OEPA Comments to X-701C Soil Draft CMI WP	8.1.02.56.02.10	1/2/03	4
32B62240	Q2 Receive USEPA Comments to X-701C Soil Draft CMI WP	8.1.02.56.02.10	1/2/03	4
32B62295	Q2 Receive OEPA Approval X-701C Soil Final CMI WP	8.1.02.56.02.10	6/1/03	4
32B62297	Q2 Receive USEPA Approval X-701C Soil Final CMI WP	8.1.02.56.02.10	6/1/03	4
32B62440	Q2 Deliver X-701C Soil Draft Final CMS Rpt to DOE	8.1.02.56.02.22	9/25/01	4
32B62455	Q2 Submit X-701C Soil Draft Final CMS Rpt to Agencies	8.1.02.56.02.22	11/13/01	4
32B62470	Q2 Receive OEPA Comments to X-701C Soil Draft Final CMS Repo	8.1.02.56.02.22	2/11/02	4
32B62496	Q2 Receive OEPA Approval X-701C Soil Final CMS Report	8.1.02.56.02.22	8/20/02	4
32B62498	Q2 Receive USEPA Approval X-701C Soil Final CMS Report	8.1.02.56.02.22	8/20/02	4
32B62480	Q2 Receive Public Comments to X-701C Soil Draft Final CMS Re	8.1.02.56.02.22	5/12/02	4
32B62471	Q2 Receive USEPA Comments to X-701C Soil Draft Final CMS Rep	8.1.02.56.02.22	2/11/02	4
32B62418	Q2 Receive OEPA Comments to X-701C Soil Draft CMS Repo	8.1.02.56.02.22	7/27/01	4
32B62420	Q2 Receive USEPA Comments to X-701C Soil Draft CMS Rep	8.1.02.56.02.22	7/27/01	4
32B57400	Q2 Start Interim Action Remedial Design X-701C Soil	8.1.02.56.04.08.20	3/1/96	4
32B57450	Q2 Deliver X-701C Soil Interim Action 90% Design Package	8.1.02.56.04.08.20	4/7/96	4
32B57490	Q2 Deliver X-701C Soil Interim Action 100% Design/CFC Package to	8.1.02.56.04.08.20	4/23/96	4
32B57510	Q2 Submit X-701C Soil Interim Action CFC Pkg To Agencies	8.1.02.56.04.08.20	4/27/96	4
32B57530	Q2 Award X-701C Soil Interim Action Remedial Action Contract	8.1.02.56.04.08.24	6/15/96	4
32B57540	Q2 Start X-701C Soil Interim Remedial Action	8.1.02.56.04.08.26	6/16/96	4
32B57560	Q2 X-701C Soil Interim Remedial Action Complete	8.1.02.56.04.08.26	9/30/96	4
32B64235	Q2 Receive OEPA Comments to X-700 Soil Draft CMI WP	8.1.02.56.06.10	9/2/04	4
32B64240	Q2 Receive USEPA Comments to X-700 Soil Draft CMI WP	8.1.02.56.06.10	9/2/04	4
32B64295	Q2 Receive OEPA Approval X-700 Soil Final CMI WP	8.1.02.56.06.10	1/30/05	4
32B64297	Q2 Receive USEPA Approval X-700 Soil Final CMI WP	8.1.02.56.06.10	1/30/05	4
32B64440	Q2 Deliver X-700 Soil Draft Final CMS Rpt to DOE	8.1.02.56.06.22	5/27/03	4
32B64455	Q2 Submit X-700 Soil Draft Final CMS Rpt to Agencies	8.1.02.56.06.22	7/15/03	4
32B64470	Q2 Receive OEPA Comments to X-700 Soil Draft Final CMS Repo	8.1.02.56.06.22	10/13/03	4
32B64496	Q2 Receive OEPA Approval X-700 Soil Final CMS Report	8.1.02.56.06.22	4/20/04	4
32B64498	Q2 Receive USEPA Approval X-700 Soil Final CMS Report	8.1.02.56.06.22	4/20/04	4
32B64480	Q2 Receive Public Comments to X-700 Soil Draft Final CMS Re	8.1.02.56.06.22	1/11/04	4
32B64471	Q2 Receive USEPA Comments to X-700 Soil Draft Final CMS Rep	8.1.02.56.06.22	10/13/03	4
32B64404	Q2 Deliver X-700 Soil Draft CMS Rpt to DOE	8.1.02.56.06.22	11/9/02	4
32B64412	Q2 Submit X-700 Soil Draft CMS Rpt to Agencies	8.1.02.56.06.22	12/28/02	4
32B64418	Q2 Receive OEPA Comments to X-700 Soil Draft CMS Repo	8.1.02.56.06.22	3/28/03	4
32B64420	Q2 Receive USEPA Comments to X-700 Soil Draft CMS Rep	8.1.02.56.06.22	3/28/03	4
32B65301	Q2 Start X-700 Soil Title I/II Design	8.1.02.56.08.20	2/4/05	4
32B65350	Q2 Deliver X-700 Soil 90% Design Package to DOE	8.1.02.56.08.20	6/3/05	4
32B65390	Q2 Submit X-700 Soil CFC Package to Agencies	8.1.02.56.08.20	7/5/05	4
32B65425	Q2 Receive OEPA Approval X-700 Soil CFC Package	8.1.02.56.08.20	11/3/05	4
32B65430	Q2 Receive USEPA Approval X-700 Soil CFC Package	8.1.02.56.08.20	11/3/05	4
32B65505	Q2 Deliver X-700 Soil Construction Certification Rpt to D	8.1.02.56.08.28	8/17/06	4
32B65520	Q2 Submit X-700 Soil ion Certification Rpt to DOE	8.1.02.56.08.28	9/16/06	4
32B65440	Q2 Award X-700 Soil Remedial Action Contract	8.1.02.56.08.24	11/15/05	4
32B66235	Q2 Receive OEPA Comments to X-720 Soil Draft CMI WP	8.1.02.56.10.10	11/1/04	4
32B66240	Q2 Receive USEPA Comments to X-720 Soil Draft CMI WP	8.1.02.56.10.10	11/1/04	4
32B66295	Q2 Receive OEPA Approval X-720 Soil Final CMI WP	8.1.02.56.10.10	3/31/05	4
32B66297	Q2 Receive USEPA Approval X-720 Soil Final CMI WP	8.1.02.56.10.10	3/31/05	4
32B66440	Q2 Deliver X-720 Soil Draft Final CMS Rpt to DOE	8.1.02.56.10.22	7/26/03	4
32B66455	Q2 Submit X-720 Soil Draft Final CMS Rpt to Agencies	8.1.02.56.10.22	9/13/03	4
32B66470	Q2 Receive OEPA Comments to X-720 Soil Draft Final CMS Repo	8.1.02.56.10.22	12/12/03	4
32B66496	Q2 Receive OEPA Approval X-720 Soil Final CMS Report	8.1.02.56.10.22	6/19/04	4
32B66498	Q2 Receive USEPA Approval X-720 Soil Final CMS Report	8.1.02.56.10.22	6/19/04	4
32B66480	Q2 Receive Public Comments to X-720 Soil Draft Final CMS Re	8.1.02.56.10.22	3/11/04	4
32B66471	Q2 Receive USEPA Comments to X-720 Soil Draft Final CMS Rep	8.1.02.56.10.22	12/12/03	4
32B66404	Q2 Deliver X-720 Soil Draft CMS Rpt to DOE	8.1.02.56.10.22	1/8/03	4
32B66412	Q2 Submit X-720 Soil Draft CMS Rpt to Agencies	8.1.02.56.10.22	2/26/03	4
32B66418	Q2 Receive OEPA Comments to X-720 Soil Draft CMS Repo	8.1.02.56.10.22	5/27/03	4
32B66420	Q2 Receive USEPA Comments to X-720 Soil Draft CMS Rep	8.1.02.56.10.22	5/27/03	4
32B67301	Q2 Start X-720 Soil Title I/II Design	8.1.02.56.12.20	5/31/01	4
32B67350	Q2 Deliver X-720 Soil 90% Design Package to DOE	8.1.02.56.12.20	9/27/01	4
32B67390	Q2 Submit X-720 Soil CFC Package to Agencies	8.1.02.56.12.20	10/29/01	4
32B67425	Q2 Receive OEPA Approval X-720 Soil CFC Package	8.1.02.56.12.20	2/27/02	4
32B67430	Q2 Receive USEPA Approval X-720 Soil CFC Package	8.1.02.56.12.20	2/27/02	4
32B67505	Q2 Deliver X-720 Soil Construction Certification Rpt to D	8.1.02.56.12.28	12/11/02	4
32B67520	Q2 Submit X-720 Soil ion Certification Rpt to DOE	8.1.02.56.12.28	1/10/03	4
32B67440	Q2 Award X-720 Soil Remedial Action Contract	8.1.02.56.12.24	3/11/02	4
32B68235	Q2 Receive OEPA Comments to X-705 Draft CMI WP	8.1.02.56.14.10	11/2/03	4
32B68240	Q2 Receive USEPA Comments to X-705 Draft CMI WP	8.1.02.56.14.10	11/2/03	4
32B68295	Q2 Receive OEPA Approval X-705 Final CMI WP	8.1.02.56.14.10	3/31/04	4
32B68297	Q2 Receive USEPA Approval X-705 Final CMI WP	8.1.02.56.14.10	3/31/04	4
32B68440	Q2 Deliver X-705 Draft Final CMS Rpt to DOE	8.1.02.56.14.22	7/26/02	4
32B68455	Q2 Submit X-705 Draft Final CMS Rpt to Agencies	8.1.02.56.14.22	9/13/02	4
32B68470	Q2 Receive OEPA Comments to X-705 Draft Final CMS Repo	8.1.02.56.14.22	12/12/02	4

32B68496	Q2 Receive OEPA Approval X-705 Final CMS Report	8.1.02.56.14.22	6/20/03	6/20/03	4
32B68498	Q2 Receive USEPA Approval X-705 Final CMS Report	8.1.02.56.14.22	6/20/03	6/20/03	4
32B68480	Q2 Receive Public Comments to X-705 Draft Final CMS Re	8.1.02.56.14.22	3/12/03	3/12/03	4
32B68471	Q2 Receive USEPA Comments to X-705 Draft Final CMS Rep	8.1.02.56.14.22	12/12/02	12/12/02	4
32B68404	Q2 Deliver X-705 Draft CMS Rpt to DOE	8.1.02.56.14.22	1/8/02	1/8/02	4
32B68412	Q2 Submit X-705 Draft CMS Rpt to Agencies	8.1.02.56.14.22	2/26/02	2/26/02	4
32B68418	Q2 Receive OEPA Comments to X-705 Draft CMS Repo	8.1.02.56.14.22	5/27/02	5/27/02	4
32B68420	Q2 Receive USEPA Comments to X-705 Draft CMS Rep	8.1.02.56.14.22	5/27/02	5/27/02	4
32B69301	Q2 Start X-705 Title I/II Design	8.1.02.56.16.20	11/30/01	11/30/01	4
32B69350	Q2 Deliver X-705 90% Design Package to DOE	8.1.02.56.16.20	3/29/02	3/29/02	4
32B69390	Q2 Submit X-705 CFC Package to Agencies	8.1.02.56.16.20	4/30/02	4/30/02	4
32B69425	Q2 Receive OEPA Approval X-705 CFC Package	8.1.02.56.16.20	8/29/02	8/29/02	4
32B69430	Q2 Receive USEPA Approval X-705 CFC Package	8.1.02.56.16.20	8/29/02	8/29/02	4
32B69505	Q2 Deliver X-705 Construction Certification Rpt to D	8.1.02.56.16.28	6/12/03	6/12/03	4
32B69520	Q2 Submit X-705 ion Certification Rpt to DOE	8.1.02.56.16.28	7/12/03	7/12/03	4
32B69440	Q2 Award X-705 Remedial Action Contract	8.1.02.56.16.24	9/10/02	9/10/02	4
32BU8655	Q2 Deliver 7-Unit Area Draft Final CMS Rpt to DOE	8.1.02.56.18.22	4/10/97	4/10/97	4
32BU8670	Q2 Submit 7-Unit Area Draft Final CMS Rpt to Agencies	8.1.02.56.18.22	5/18/97	5/18/97	4
32BU8695	Q2 Receive OEPA Comments 7-Unit Area Draft Final CMS Rpt	8.1.02.56.18.22	6/17/97	6/17/97	4
32BU8700	Q2 Receive Public Comments 7-Unit Area Draft Final CMS Rpt	8.1.02.56.18.22	7/17/97	7/17/97	4
32BU8745	Q2 Receive OEPA Approval 7-Unit Area Final CMS Rpt	8.1.02.56.18.22	10/17/97	10/17/97	4
32BU8750	Q2 Receive USEPA Approval 7-Unit Area Final CMS Rpt	8.1.02.56.18.22	10/17/97	10/17/97	4
32BU8874	Q2 Receive OEPA Cmnts to 7-Unit Area Draft CMI Work Plan	8.1.02.56.18.10	1/15/98	1/15/98	4
32BU8876	Q2 Receive USEPA Cmnts to 7-Unit Area Draft CMI Work Plan	8.1.02.56.18.10	1/15/98	1/15/98	4
32BU8895	Q2 Receive OEPA Approval 7-Unit Area Final CMI Work Plan	8.1.02.56.18.10	6/30/98	6/30/98	4
32BU8896	Q2 Receive USEPA Approval 7-Unit Area Final CMI Work Plan	8.1.02.56.18.10	6/30/98	6/30/98	4
32BU8415	Q2 Award 7-Unit Area Groundwater Plume Remedial Action Contract	8.1.02.56.20.24	8/31/01	8/31/01	4
32BU8440	Q2 Deliver 7-Unit Area GW Construction Certification Rpt to DOE	8.1.02.56.20.28	12/24/02	12/24/02	4
32BU8455	Q2 Submit 7-Unit Area GW Construction Certification Rpt to OEPA	8.1.02.56.20.28	1/23/03	1/23/03	4
32BU8300	Q2 Start 7-Unit Area Groundwater Plume Remedial Design	8.1.02.56.20.20	10/1/00	10/1/00	4
32BU8350	Q2 Deliver 7-Unit 90% Design Pkg to DOE	8.1.02.56.20.20	3/11/01	3/11/01	4
32BU8385	Q2 Submit 7-Unit Area Groundwater Plume CFC Package to Agencies	8.1.02.56.20.20	4/30/01	4/30/01	4
32BU8388	Q2 Receive OEPA Cmnts to 7-Unit Area Groundwater CFC Pkg	8.1.02.56.20.20	5/10/01	5/10/01	4
32BU8389	Q2 Receive USEPA Cmnts to 7-Unit Area Groundwater CFC Pkg	8.1.02.56.20.20	5/10/01	5/10/01	4
32BU8391	Q2 Receive OEPA Approval 7-Unit Area GW CFC Pkg	8.1.02.56.20.20	5/12/01	5/12/01	4
32BU8392	Q2 Receive USEPA Approval 7-Unit Area GW CFC Pkg	8.1.02.56.20.20	5/12/01	5/12/01	4
32BU8308	Q2 Deliver 7-Unit 30% Design Pkg To DOE	8.1.02.56.20.20	10/30/00	10/30/00	4
32BU8323	Q2 Deliver 7-Unit 60% Design Pkg To DOE	8.1.02.56.20.20	12/25/00	12/25/00	4
32B72235	Q2 Receive OEPA Comments to X-633 Draft CMI WP	8.1.02.58.02.10	1/2/03	1/2/03	4
32B72240	Q2 Receive USEPA Comments to X-633 Draft CMI WP	8.1.02.58.02.10	1/2/03	1/2/03	4
32B72295	Q2 Receive OEPA Approval X-633 Final CMI WP	8.1.02.58.02.10	6/1/03	6/1/03	4
32B72297	Q2 Receive USEPA Approval X-633 Final CMI WP	8.1.02.58.02.10	6/1/03	6/1/03	4
32B72404	Q2 Deliver X-633 Draft CMS Rpt to DOE	8.1.02.58.02.22	3/10/01	3/10/01	4
32B72412	Q2 Submit X-633 Draft CMS Rpt to Agencies	8.1.02.58.02.22	4/28/01	4/28/01	4
32B72418	Q2 Receive OEPA Comments to X-633 Draft CMS Repo	8.1.02.58.02.22	7/27/01	7/27/01	4
32B72420	Q2 Receive USEPA Comments to X-633 Draft CMS Rep	8.1.02.58.02.22	7/27/01	7/27/01	4
32B72440	Q2 Deliver X-633 Draft Final CMS Rpt to DOE	8.1.02.58.02.22	9/25/01	9/25/01	4
32B72455	Q2 Submit X-633 Draft Final CMS Rpt to Agencies	8.1.02.58.02.22	11/13/01	11/13/01	4
32B72470	Q2 Receive OEPA Comments to X-633 Draft Final CMS Repo	8.1.02.58.02.22	2/11/02	2/11/02	4
32B72471	Q2 Receive USEPA Comments to X-633 Draft Final CMS Rep	8.1.02.58.02.22	2/11/02	2/11/02	4
32B72480	Q2 Receive Public Comments to X-633 Draft Final CMS Re	8.1.02.58.02.22	5/12/02	5/12/02	4
32B72496	Q2 Receive OEPA Approval X-633 Final CMS Report	8.1.02.58.02.22	8/20/02	8/20/02	4
32B72498	Q2 Receive USEPA Approval X-633 Final CMS Report	8.1.02.58.02.22	8/20/02	8/20/02	4
32B73301	Q2 Start X-633 Title I/II Design	8.1.02.58.04.20	6/2/03	6/2/03	4
32B73350	Q2 Deliver X-633 90% Design Package to DOE	8.1.02.58.04.20	9/29/03	9/29/03	4
32B73390	Q2 Submit X-633 CFC Package to Agencies	8.1.02.58.04.20	10/31/03	10/31/03	4
32B73425	Q2 Receive OEPA Approval X-633 CFC Package	8.1.02.58.04.20	2/29/04	2/29/04	4
32B73430	Q2 Receive USEPA Approval X-633 CFC Package	8.1.02.58.04.20	2/29/04	2/29/04	4
32B73440	Q2 Award X-633 Remedial Action Contract	8.1.02.58.04.24	3/12/04	3/12/04	4
32B73505	Q2 Deliver X-633 Construction Certification Rpt to D	8.1.02.58.04.28	12/12/04	12/12/04	4
32B73520	Q2 Submit X-633 ion Certification Rpt to DOE	8.1.02.58.04.28	1/11/05	1/11/05	4
32B76235	Q2 Receive OEPA Comments to X-747G Draft CMI WP	8.1.02.58.10.10	1/1/01	1/1/01	4
32B76240	Q2 Receive USEPA Comments to X-747G Draft CMI WP	8.1.02.58.10.10	1/1/01	1/1/01	4
32B76295	Q2 Receive OEPA Approval X-747G Final CMI WP	8.1.02.58.10.10	5/31/01	5/31/01	4
32B76297	Q2 Receive USEPA Approval X-747G Final CMI WP	8.1.02.58.10.10	5/31/01	5/31/01	4
32B76404	Q2 Deliver X-747G Draft CMS Rpt to DOE	8.1.02.58.10.22	3/10/99	3/10/99	4
32B76412	Q2 Submit X-747G Draft CMS Rpt to Agencies	8.1.02.58.10.22	4/28/99	4/28/99	4
32B76418	Q2 Receive OEPA Comments to X-747G Draft CMS Repo	8.1.02.58.10.22	7/27/99	7/27/99	4
32B76420	Q2 Receive USEPA Comments to X-747G Draft CMS Rep	8.1.02.58.10.22	7/27/99	7/27/99	4
32B76440	Q2 Deliver X-747G Draft Final CMS Rpt to DOE	8.1.02.58.10.22	9/25/99	9/25/99	4
32B76455	Q2 Submit X-747G Draft Final CMS Rpt to Agencies	8.1.02.58.10.22	11/13/99	11/13/99	4
32B76470	Q2 Receive OEPA Comments to X-747G Draft Final CMS Repo	8.1.02.58.10.22	2/11/00	2/11/00	4
32B76471	Q2 Receive USEPA Comments to X-747G Draft Final CMS Rep	8.1.02.58.10.22	2/11/00	2/11/00	4
32B76480	Q2 Receive Public Comments to X-747G Draft Final CMS Re	8.1.02.58.10.22	5/11/00	5/11/00	4
32B76496	Q2 Receive OEPA Approval X-747G Final CMS Report	8.1.02.58.10.22	8/19/00	8/19/00	4
32B76498	Q2 Receive USEPA Approval X-747G Final CMS Report	8.1.02.58.10.22	8/19/00	8/19/00	4
32B77301	Q2 Start X-747G Title I/II Design	8.1.02.58.12.20	6/1/01	6/1/01	4
32B77350	Q2 Deliver X-747G 90% Design Package to DOE	8.1.02.58.12.20	9/28/01	9/28/01	4
32B77390	Q2 Submit X-747G CFC Package to Agencies	8.1.02.58.12.20	10/30/00	10/30/00	4
32B77425	Q2 Receive OEPA Approval X-747G CFC Package	8.1.02.58.12.20	2/28/02	2/28/02	4
32B77430	Q2 Receive USEPA Approval X-747G CFC Package	8.1.02.58.12.20	2/28/02	2/28/02	4
32B77440	Q2 Award X-747G Remedial Action Contract	8.1.02.58.12.24	3/12/02	3/12/02	4
32B77505	Q2 Deliver X-747G Construction Certification Rpt to D	8.1.02.58.12.28	12/12/02	12/12/02	4
32B77520	Q2 Submit X-747G ion Certification Rpt to DOE	8.1.02.58.12.28	1/11/03	1/11/03	4
32B80235	Q2 Receive OEPA Comments to Process Waste Lines Draft CMI WP	8.1.02.58.18.10	1/1/02	1/1/02	4
32B80240	Q2 Receive USEPA Comments to Process Waste Lines Draft CMI WP	8.1.02.58.18.10	1/1/02	1/1/02	4
32B80295	Q2 Receive OEPA Approval Process Waste Lines Final CMI WP	8.1.02.58.18.10	5/31/02	5/31/02	4
32B80297	Q2 Receive USEPA Approval Process Waste Lines Final CMI WP	8.1.02.58.18.10	5/31/02	5/31/02	4
32B80404	Q2 Deliver Process Waste Lines Draft CMS Rpt to DOE	8.1.02.58.18.22	3/9/00	3/9/00	4
32B80412	Q2 Submit Process Waste Lines Draft CMS Rpt to Agencies	8.1.02.58.18.22	4/27/00	4/27/00	4
32B80418	Q2 Receive OEPA Comments to Process Waste Lines Draft CMS Repo	8.1.02.58.18.22	7/26/00	7/26/00	4
32B80420	Q2 Receive USEPA Comments to Process Waste Lines Draft CMS Rep	8.1.02.58.18.22	7/26/00	7/26/00	4
32B80440	Q2 Deliver Process Waste Lines Draft Final CMS Rpt to DOE	8.1.02.58.18.22	9/24/00	9/24/00	4
32B80455	Q2 Submit Process Waste Lines Draft Final CMS Rpt to Agencies	8.1.02.58.18.22	11/12/00	11/12/00	4
32B80470	Q2 Receive OEPA Comments to Process Waste Lines Draft Final CMS R	8.1.02.58.18.22	2/10/01	2/10/01	4
32B80471	Q2 Receive USEPA Comments to Process Waste Lines Draft Final CMS	8.1.02.58.18.22	2/10/01	2/10/01	4
32B80480	Q2 Receive Public Comments to Process Waste Lines Draft Final CMS	8.1.02.58.18.22	5/11/01	5/11/01	4
32B80496	Q2 Receive OEPA Approval Process Waste Lines Final CMS Report	8.1.02.58.18.22	8/19/01	8/19/01	4
32B80498	Q2 Receive USEPA Approval Process Waste Lines Final CMS Report	8.1.02.58.18.22	8/19/01	8/19/01	4
32B81301	Q2 Start Process Waste Lines Title I/II Design	8.1.02.58.20.20	6/1/02	6/1/02	4
32B81350	Q2 Deliver Process Waste Lines 90% Design Package to DOE	8.1.02.58.20.20	9/28/02	9/28/02	4
32B81390	Q2 Submit Process Waste Lines CFC Package to Agencies	8.1.02.58.20.20	10/30/02	10/30/02	4
32B81425	Q2 Receive OEPA Approval Process Waste Lines CFC Package	8.1.02.58.20.20	2/28/03	2/28/03	4
32B81430	Q2 Receive USEPA Approval Process Waste Lines CFC Package	8.1.02.58.20.20	2/28/03	2/28/03	4
32B81440	Q2 Award Process Waste Lines Remedial Action Contract	8.1.02.58.20.24	3/12/03	3/12/03	4
32B81505	Q2 Deliver Process Waste Lines Construction Certification Rpt to	8.1.02.58.20.28	12/12/03	12/12/03	4
32B81520	Q2 Submit Process Waste Lines ion Certification Rpt to DOE	8.1.02.58.20.28	1/11/04	1/11/04	4
33C06260	Q3 Submit Quadwide Draft Final RFI Report to Agencies	8.1.03.50.02.08	11/3/94	11/3/94	4
33C06115	Q3 Submit RFI Phase 2 Work Plan to Agencies	8.1.03.50.02.06	1/26/93	1/26/93	4
33C06120	Q3 Receive Agencies Approval of Phase 2 RFI Work Plan	8.1.03.50.02.06	4/6/94	4/6/94	4
33C06305	Q3 Receive USEPA Approval of Final RFI Rpt	8.1.03.50.02.08	1/22/97	1/22/97	4
33C06245	Q3 Deliver Draft Final RFI Rpt to DOE	8.1.03.50.02.08	9/16/94	9/16/94	4
33C06210	Q3 Receive OEPA Cmnts on Draft RFI Rpt	8.1.03.50.02.08	1/27/94	1/27/94	4
33C06105	Q3 RFI-Work Plan-Phase 2-USEPA Approval	8.1.03.50.02.06	3/25/94	3/25/94	4
33C06215	Q3 USEPA Approval of Draft RFI Rpt	8.1.03.50.02.08	3/25/94	3/25/94	4
33C06300	Q3 Receive OEPA Approval of Final RFI Rpt	8.1.03.50.02.08	1/22/97	1/22/97	4
33C06220	Q3 OEPA Approval of Draft RFI Rpt	8.1.03.50.02.08	4/6/94	4/6/94	4
33C06281	Q3 Received USEPA Conditional Approval of Draft Final RFI Report	8.1.03.50.02.08	5/24/95	5/24/95	4
33C06284	Q3 Received OEPA Conditional Approval to Draft Final RFI Report	8.1.03.50.02.08	7/25/95	7/25/95	4
33C07065	Q3 Receive USEPA Approval of Final CMS Work Plan	8.1.03.50.04.06	2/9/95	2/9/95	4
33C07195	Q3 Submit Quadwide Draft Final CMS Report to Agencies	8.1.03.50.04.08	5/12/04	5/12/04	4
33C07215	Q3 Receive OEPA Cmnts to Draft Final CMS Rpt	8.1.03.50.04.08	8/10/04	8/10/04	4
33C07270	Q3 Receive OEPA Approval of Final CMS Rpt	8.1.03.50.04.08	1/22/05	1/22/05	4
33C07180	Q3 Deliver Draft Final CMS Rpt to DOE	8.1.03.50.04.08	3/24/04	3/24/04	4
33C07070	Q3 Receive OEPA Approval of Final CMS Work Plan	8.1.03.50.04.06	9/19/95	9/19/95	4
33C07155	Q3 Receive OEPA Cmnts to Draft CMS Rpt	8.1.03.50.04.08	12/24/95	12/24/95	4
33C07230	Q3 Receive Public Cmnts to Draft Final CMS Rpt	8.1.03.50.04.08	10/9/04	10/9/04	4
33C07275	Q3 Receive USEPA Approval of Final CMS Rpt	8.1.03.50.04.08	1/22/05	1/22/05	4
33C07216	Q3 Receive USEPA Cmnts to Draft Final CMS Rpt	8.1.03.50.04.08	8/10/04	8/10/04	4
33C07150	Q3 Receive USEPA Cmnts to Draft CMS Rpt	8.1.03.50.04.08	12/24/95	12/24/95	4
33C07335	Q3 Receive OEPA Comments to Quadwide Draft CMI WP	8.1.03.50.04.12	6/6/05	6/6/05	4

33C07340	Q3	Receive USEPA Comments to Quadwide Draft CMI WP		8.1.03.50.04.12	6/6/05	6/6/05	4
33C07405	Q3	Receive OEPA Approval Quadwide Final CMI WP		8.1.03.50.04.12	11/3/05	11/3/05	4
33C07407	Q3	Receive USEPA Approval Quadwide Final CMI WP		8.1.03.50.04.12	11/3/05	11/3/05	4
33C52004	Q3	SEP - DOE/OEPA Concurrence & Approval	3/8/96	8.1.03.52.02.20	3/8/96	3/8/96	4
33C52M10	Q3	SEP - Approval of Permit To Install/Permit To Operate		8.1.03.52.02.16	6/24/97	6/24/97	4
33C52M15	Q3	SEP - Project Complete - Contractor Begins O & M		8.1.03.52.02.26	2/21/98	2/21/98	4
33C55301	Q3	Start X-740 Title I/II Design	10/1/04	8.1.03.54.04.20	10/1/04	10/1/04	4
33C55350	Q3	Deliver X-740 90% Design Package to DOE		8.1.03.54.04.20	1/28/05	1/28/05	4
33C55390	Q3	Submit X-740 CFC Package to Agencies		8.1.03.54.04.20	3/1/05	3/1/05	4
33C55425	Q3	Receive OEPA Approval X-740 CFC Package		8.1.03.54.04.20	6/30/05	6/30/05	4
33C55430	Q3	Receive USEPA Approval X-740 CFC Package		8.1.03.54.04.20	6/30/05	6/30/05	4
33C55505	Q3	Deliver X-740 Construction Certification Rpt to D		8.1.03.54.04.28	4/13/06	4/13/06	4
33C55520	Q3	Submit X-740 ion Certification Rpt to DOE		8.1.03.54.04.28	5/13/06	5/13/06	4
33C55440	Q3	Award X-740 Remedial Action Contract		8.1.03.54.04.24	7/12/05	7/12/05	4
33C55200	Q3	Submit X-740 Risk Based Closure Plan to Agencies		8.1.03.54.04.08.26	8/30/96	8/30/96	4
33C55065	Q3	Submit X-740 Risk Assessment to Agencies		8.1.03.54.04.08.26	6/5/96	6/5/96	4
33C64235	Q3	Receive OEPA Comments to X-230J5 Draft CMI WP		8.1.03.56.18.10	2/1/01	2/1/01	4
33C64240	Q3	Receive USEPA Comments to X-230J5 Draft CMI WP		8.1.03.56.18.10	2/1/01	2/1/01	4
33C64295	Q3	Receive OEPA Approval X-230J5 Final CMI WP		8.1.03.56.18.10	7/1/01	7/1/01	4
33C64297	Q3	Receive USEPA Approval X-230J5 Final CMI WP		8.1.03.56.18.10	7/1/01	7/1/01	4
33C64404	Q3	Deliver X-230J5 Draft CMS Rpt to DOE		8.1.03.56.18.22	4/10/99	4/10/99	4
33C64412	Q3	Submit X-230J5 Draft CMS Rpt to Agencies		8.1.03.56.18.22	5/29/99	5/29/99	4
33C64418	Q3	Receive OEPA Comments to X-230J5 Draft CMS Repo		8.1.03.56.18.22	8/27/99	8/27/99	4
33C64420	Q3	Receive USEPA Comments to X-230J5 Draft CMS Rep		8.1.03.56.18.22	8/27/99	8/27/99	4
33C64440	Q3	Deliver X-230J5 Draft Final CMS Rpt to DOE		8.1.03.56.18.22	10/26/99	10/26/99	4
33C64455	Q3	Submit X-230J5 Draft Final CMS Rpt to Agencies		8.1.03.56.18.22	12/14/99	12/14/99	4
33C64470	Q3	Receive OEPA Comments to X-230J5 Draft Final CMS Repo		8.1.03.56.18.22	3/13/00	3/13/00	4
33C64471	Q3	Receive USEPA Comments to X-230J5 Draft Final CMS Rep		8.1.03.56.18.22	3/13/00	3/13/00	4
33C64480	Q3	Receive Public Comments to X-230J5 Draft Final CMS Re		8.1.03.56.18.22	6/11/00	6/11/00	4
33C64496	Q3	Receive OEPA Approval X-230J5 Final CMS Report		8.1.03.56.18.22	9/19/00	9/19/00	4
33C64498	Q3	Receive USEPA Approval X-230J5 Final CMS Report		8.1.03.56.18.22	9/19/00	9/19/00	4
33C65301	Q3	Start X-230J5 Title I/II Design		8.1.03.56.20.20	7/2/01	7/2/01	4
33C65350	Q3	Deliver X-230J5 90% Design Package to DOE		8.1.03.56.20.20	10/29/01	10/29/01	4
33C65425	Q3	Receive OEPA Approval X-230J5 CFC Package		8.1.03.56.20.20	3/31/02	3/31/02	4
33C65430	Q3	Receive USEPA Approval X-230J5 CFC Package		8.1.03.56.20.20	3/31/02	3/31/02	4
33C65440	Q3	Award X-230J5 Remedial Action Contract		8.1.03.56.20.24	4/12/02	4/12/02	4
33C65505	Q3	Deliver X-230J5 Construction Certification Rpt to D		8.1.03.56.20.28	1/12/03	1/12/03	4
33C65520	Q3	Submit X-230J5 ion Certification Rpt to DOE		8.1.03.56.20.28	2/11/03	2/11/03	4
34D06100	Q4	RFI-Conclude Discussions With Agencies		8.1.04.50.02.06	11/1/92	11/1/92	4
34D06120	Q4	RFI-Revised Work Plan Submitted		8.1.04.50.02.06	12/23/92	12/23/92	4
34D06115	Q4	RFI-Conditional Approval of Revised Work Plan		8.1.04.50.02.06	12/3/92	12/3/92	4
34D06110	Q4	RFI-USEPA Approval With Mod's-RFI Work Plan		8.1.04.50.02.06	11/27/92	11/27/92	4
34D06340	Q4	Receive OEPA Approval of Final RFI Report		8.1.04.50.02.08	8/20/97	8/20/97	4
34D06280	Q4	Deliver Draft Final RFI Rpt to DOE		8.1.04.50.02.08	9/16/94	9/16/94	4
34D06295	Q4	Submit Draft Final RFI Rpt to Agencies	11/4/99	8.1.04.50.02.08	11/3/94	11/3/94	4
34D06180	Q4	Receive USEPA Approval Phase II RFI Work Plan /Telecon Conf		8.1.04.50.02.06	9/11/94	9/11/94	4
34D06130	Q4	RFI Receive OEPA Cmmts on Work Plan		8.1.04.50.02.06	12/20/93	12/20/93	4
34D06140	Q4	Submit Phase 2 RFI Work Plan to Agencies		8.1.04.50.02.06	2/4/94	2/4/94	4
34D06150	Q4	Receive OEPA Approval of Phase 2 RFI Work Plan		8.1.04.50.02.06	3/4/94	3/4/94	4
34D06255	Q4	RFI Rpt-Receive OEPA Cmmts		8.1.04.50.02.08	1/27/94	1/27/94	4
34D06250	Q4	RFI Rpt-Receive USEPA RA Cmmts		8.1.04.50.02.08	1/24/94	1/24/94	4
34D06155	Q4	Submit Revised Work Plan to USEPA		8.1.04.50.02.06	4/4/94	4/4/94	4
34D06345	Q4	Receive USEPA Approval of Final RFI Report		8.1.04.50.02.08	8/20/97	8/20/97	4
34D06160	Q4	Receive USEPA Cmmts to Phase 2 RFI Work Plan		8.1.04.50.02.06	6/13/94	6/13/94	4
34D06170	Q4	Submit Final RFI Work Plan to USEPA = Telecon confirmation		8.1.04.50.02.06	8/11/94	8/11/94	4
34D06318	Q4	Received OEPA Approval to Draft Final RFI Report		8.1.04.50.02.08	7/25/95	7/25/95	4
34D07275	Q4	Submit Quadwide Draft Final CMS Report to Agencies		8.1.04.50.04.08	3/13/10	3/13/10	4
34D07305	Q4	Receive Public Cmmts Draft Final CMS Rpt		8.1.04.50.04.08	8/10/10	8/10/10	4
34D07355	Q4	Receive OEPA Approval of Final CMS Rpt		8.1.04.50.04.08	11/23/10	11/23/10	4
34D07255	Q4	Deliver Draft Final CMS Rpt to DOE		8.1.04.50.04.08	1/23/10	1/23/10	4
34D07125	Q4	Receive USEPA Approval of Draft CMS Work Plan		8.1.04.50.04.06	2/8/95	2/8/95	4
34D07130	Q4	Receive OEPA Approval to Draft CMS Work Plan		8.1.04.50.04.06	12/29/94	12/29/94	4
34D07290	Q4	Receive OEPA Cmmts to Draft Final CMS Rpt		8.1.04.50.04.08	6/11/10	6/11/10	4
34D07360	Q4	Receive USEPA Approval of Final CMS Rpt		8.1.04.50.04.08	11/23/10	11/23/10	4
34D07202	Q4	Submit Partial Draft CMS Report to DOE & MMES		8.1.04.50.04.08	12/30/94	12/30/94	4
34D07236	Q4	Receive OEPA Cmmts to Draft CMS Rpt		8.1.04.50.04.08	8/8/95	8/8/95	4
34D07241	Q4	Receive USEPA Cmmts to Draft CMS Rpt		8.1.04.50.04.08	6/14/95	6/14/95	4
34D07291	Q4	Receive USEPA Cmmts to Draft Final CMS Rpt		8.1.04.50.04.08	6/11/10	6/11/10	4
34D07435	Q4	Receive OEPA Comments to Quadwide Draft CMI WP		8.1.04.50.04.12	4/7/11	4/7/11	4
34D07440	Q4	Receive USEPA Comments to Quadwide Draft CMI WP		8.1.04.50.04.12	4/7/11	4/7/11	4
34D07505	Q4	Receive OEPA Approval Quadwide Final CMI WP		8.1.04.50.04.12	9/4/11	9/4/11	4
34D07507	Q4	Receive USEPA Approval Quadwide Final CMI WP		8.1.04.50.04.12	9/4/11	9/4/11	4
34D52010	Q4	Submit X-611A Pre-Draft CMS Rpt to Agencies		8.1.04.52.02.22	3/17/94	3/17/94	4
34D52050	Q4	Receive OEPA Cmmts to X-611A Draft CMS Rpt		8.1.04.52.02.22	9/16/94	9/16/94	4
34D52055	Q4	Receive USEPA Cmmts to X-611A Draft CMS Rpt		8.1.04.52.02.22	9/21/94	9/21/94	4
34D52070	Q4	Deliver X-611A Draft Final CMS Rpt to DOE		8.1.04.52.02.22	10/1/94	10/1/94	4
34D52085	Q4	Submit X-611A Draft Final CMS Rpt to Agencies		8.1.04.52.02.22	10/14/94	10/14/94	4
34D52100	Q4	Receive OEPA Cmmts to X-611A Draft Final CMS Rpt		8.1.04.52.02.22	10/31/94	10/31/94	4
34D52112	Q4	Submit X-611A Draft Final CMS Rpt Revision 2 to Agencies		8.1.04.52.02.22	11/1/94	11/1/94	4
34D52115	Q4	Receive Public Cmmts X-611A Draft Final CMS Rpt		8.1.04.52.02.22	2/13/96	2/13/96	4
34D52155	Q4	Receive OEPA Approval X-611A Final CMS Report		8.1.04.52.02.22	5/1/96	5/1/96	4
34D52160	Q4	Receive USEPA Approval X-611A Final CMS Report		8.1.04.52.02.22	5/1/96	5/1/96	4
34D52245	Q4	Receive OEPA Cmmts to X-611A Draft CMI Work Plan		8.1.04.52.02.10	6/25/96	6/25/96	4
34D52250	Q4	Receive USEPA Cmmts to X-611A Draft CMI Work Plan		8.1.04.52.02.10	6/25/96	6/25/96	4
34D52295	Q4	Receive OEPA Approval X-611A Final CMI Work Plan		8.1.04.52.02.10	10/13/96	10/13/96	4
34D52297	Q4	Receive USEPA Approval X-611A Final CMI Work Plan		8.1.04.52.02.10	10/13/96	10/13/96	4
34D53100	Q4	Start X-611A Interim Action Remedial Design	12/31/95	8.1.04.52.04.08.20	12/31/95	12/31/95	4
34D53150	Q4	Deliver X-611A Interim Action 90% Design Package to Bidders		8.1.04.52.04.08.24	4/10/96	4/10/96	4
34D53240	Q4	Start X-611A Interim Remedial Action		8.1.04.52.04.08.26	6/23/96	6/23/96	4
34D16075	Q4	Issue Final SRD for Signatures X-344A		8.1.04.54.04.08.26	3/28/94	3/28/94	4
34D16010	Q4	Submit X-344A Closure Plan to Agencies		8.1.04.54.04.08.26	11/15/93	11/15/93	4
34D16020	Q4	Received Agencies Disapproval of X-344A Closure Plan		8.1.04.54.04.08.26	5/9/94	5/9/94	4
34D16030	Q4	Submit X-344A Revised Closure Plan to Agencies		8.1.04.54.04.08.26	6/10/94	6/10/94	4
34D16045	Q4	Receive OEPA Approval of Revised Closure Plan		8.1.04.54.04.08.26	8/22/94	8/22/94	4
34D16125	Q4	Issue Approved X-344A CFC Drawings		8.1.04.54.04.08.20	11/30/94	11/30/94	4
34D16050	Q4	Receive USEPA Approval of Revised Closure Plan		8.1.04.54.04.08.26	8/22/94	8/22/94	4
34D16275	Q4	Submit Amended Closure Plan & Risk Based Agreement to OEPA		8.1.04.54.04.08.26	8/31/95	8/31/95	4
34D16290	Q4	Approval of Closure Plan or Transfer to CMS		8.1.04.54.04.08.26	3/31/96	3/31/96	4
34D16120	Q4	Recieve EFHA Approval for CFC	11/29/99	8.1.04.54.04.08.20	11/29/94	11/29/94	4
34D16112	Q4	Submit CFC Pkg to MMES Construction		8.1.04.54.04.08.20	11/18/94	11/18/94	4
34D16213	Q4	Award X-344A Contract		8.1.04.54.04.08.24	3/7/95	3/7/95	4
34D16227	Q4	Schedule Accelerator		8.1.04.54.04.08.24	3/24/95	3/24/95	4
34D16229	Q4	Staff Review		8.1.04.54.04.08.24	3/31/95	3/31/95	4
34D86235	Q4	Receive OEPA Comments to X-734 Draft CMI WP		8.1.04.56.54.10	11/1/04	11/1/04	4
34D86240	Q4	Receive USEPA Comments to X-734 Draft CMI WP		8.1.04.56.54.10	11/1/04	11/1/04	4
34D86295	Q4	Receive OEPA Approval X-734 Final CMI WP		8.1.04.56.54.10	3/31/05	3/31/05	4
34D86297	Q4	Receive USEPA Approval X-734 Final CMI WP		8.1.04.56.54.10	3/31/05	3/31/05	4
34D86404	Q4	Deliver X-734 Draft CMS Rpt to DOE		8.1.04.56.54.22	1/8/03	1/8/03	4
34D86412	Q4	Submit X-734 Draft CMS Rpt to Agencies		8.1.04.56.54.22	2/26/03	2/26/03	4
34D86418	Q4	Receive OEPA Comments to X-734 Draft CMS Repo		8.1.04.56.54.22	5/27/03	5/27/03	4
34D86420	Q4	Receive USEPA Comments to X-734 Draft CMS Rep		8.1.04.56.54.22	5/27/03	5/27/03	4
34D86440	Q4	Deliver X-734 Draft Final CMS Rpt to DOE		8.1.04.56.54.22	7/26/03	7/26/03	4
34D86455	Q4	Submit X-734 Draft Final CMS Rpt to Agencies		8.1.04.56.54.22	9/13/03	9/13/03	4
34D86470	Q4	Receive OEPA Comments to X-734 Draft Final CMS Repo		8.1.04.56.54.22	12/12/03	12/12/03	4
34D86471	Q4	Receive USEPA Comments to X-734 Draft Final CMS Rep		8.1.04.56.54.22	12/12/03	12/12/03	4
34D86480	Q4	Receive Public Comments to X-734 Draft Final CMS Re		8.1.04.56.54.22	3/11/04	3/11/04	4
34D86496	Q4	Receive OEPA Approval X-734 Final CMS Report		8.1.04.56.54.22	6/19/04	6/19/04	4
34D86498	Q4	Receive USEPA Approval X-734 Final CMS Report		8.1.04.56.54.22	6/19/04	6/19/04	4
34D87301	Q4	Start X-734 Title I/II Design		8.1.04.56.56.20	4/1/05	4/1/05	4
34D87350	Q4	Deliver X-734 90% Design Package to DOE		8.1.04.56.56.20	7/29/05	7/29/05	4
34D87390	Q4	Submit X-734 CFC Package to Agencies		8.1.04.56.56.20	8/30/05	8/30/05	4
34D87425	Q4	Receive OEPA Approval X-734 CFC Package		8.1.04.56.56.20	12/29/05	12/29/05	4
34D87430	Q4	Receive USEPA Approval X-734 CFC Package		8.1.04.56.56.20	12/29/05	12/29/05	4
34D87440	Q4	Award X-734 Remedial Action Contract		8.1.04.56.56.24	1/10/06	1/10/06	4
34D87505	Q4	Deliver X-734 Construction Certification Rpt to D		8.1.04.56.56.28	6/24/07	6/24/07	4
34D87520	Q4	Submit X-734 ion Certification Rpt to DOE		8.1.04.56.56.28	7/24/07	7/24/07	4
34D36235	Q4	Receive OEPA Comments to X-747H Draft CMI WP		8.1.04.56.75.10	3/4/10	3/4/10	4
34D36240	Q4	Receive USEPA Comments to X-747H Draft CMI WP		8.1.04.56.75.10	3/4/10	3/4/10	4
34D36295	Q4	Receive OEPA Approval X-747H Final CMI WP					

34D36412	Q4	Submit X-747H Draft CMS Rpt to Agencies	8.1.04.56.75.22	6/28/08	6/28/08	4
34D36418	Q4	Receive OEPA Comments to X-747H Draft CMS Repo	8.1.04.56.75.22	9/26/08	9/26/08	4
34D36420	Q4	Receive USEPA Comments to X-747H Draft CMS Rep	8.1.04.56.75.22	9/26/08	9/26/08	4
34D36440	Q4	Deliver X-747H Draft Final CMS Rpt to DOE	8.1.04.56.75.22	11/25/08	11/25/08	4
34D36455	Q4	Submit X-747H Draft Final CMS Rpt to Agencies	8.1.04.56.75.22	1/13/09	1/13/09	4
34D36470	Q4	Receive OEPA Comments to X-747H Draft Final CMS Repo	8.1.04.56.75.22	4/13/09	4/13/09	4
34D36471	Q4	Receive USEPA Comments to X-747H Draft Final CMS Rep	8.1.04.56.75.22	4/13/09	4/13/09	4
34D36480	Q4	Receive Public Comments to X-747H Draft Final CMS Re	8.1.04.56.75.22	7/12/09	7/12/09	4
34D36496	Q4	Receive OEPA Approval X-747H Final CMS Report	8.1.04.56.75.22	10/20/09	10/20/09	4
34D36498	Q4	Receive USEPA Approval X-747H Final CMS Report	8.1.04.56.75.22	10/20/09	10/20/09	4
34D37301	Q4	Start X-747H Title I/II Design	8.1.04.56.76.20	8/2/10	8/2/10	4
34D37350	Q4	Deliver X-747H 90% Design Package to DOE	8.1.04.56.76.20	11/29/10	11/29/10	4
34D37390	Q4	Submit X-747H CFC Package to Agencies	8.1.04.56.76.20	12/31/10	12/31/10	4
34D37425	Q4	Receive OEPA Approval X-747H CFC Package	8.1.04.56.76.20	5/1/11	5/1/11	4
34D37430	Q4	Receive USEPA Approval X-747H CFC Package	8.1.04.56.76.20	5/1/11	5/1/11	4
34D37440	Q4	Award X-747H Remedial Action Contract	8.1.04.56.76.24	5/13/11	5/13/11	4
34D37505	Q4	Deliver X-747H Construction Certification Rpt to D	8.1.04.56.76.28	2/12/12	2/12/12	4
34D37520	Q4	Submit X-747H ion Certification Rpt to DOE	8.1.04.56.76.28	3/13/12	3/13/12	4
34D40235	Q4	Receive OEPA Comments to X-334 Draft CMI WP	8.1.04.56.92.10	11/2/02	11/2/02	4
34D40240	Q4	Receive USEPA Comments to X-334 Draft CMI WP	8.1.04.56.92.10	11/2/02	11/2/02	4
34D40295	Q4	Receive OEPA Approval X-334 Final CMI WP	8.1.04.56.92.10	4/1/03	4/1/03	4
34D40297	Q4	Receive USEPA Approval X-334 Final CMI WP	8.1.04.56.92.10	4/1/03	4/1/03	4
34D40404	Q4	Deliver X-334 Draft CMS Rpt to DOE	8.1.04.56.92.22	1/8/01	1/8/01	4
34D40412	Q4	Submit X-334 Draft CMS Rpt to Agencies	8.1.04.56.92.22	2/26/01	2/26/01	4
34D40418	Q4	Receive OEPA Comments to X-334 Draft CMS Report	8.1.04.56.92.22	5/27/01	5/27/01	4
34D40420	Q4	Receive USEPA Comments to X-334 Draft CMS Report	8.1.04.56.92.22	5/27/01	5/27/01	4
34D40440	Q4	Deliver X-334 Draft Final CMS Rpt to DOE	8.1.04.56.92.22	7/26/01	7/26/01	4
34D40455	Q4	Submit X-334 Draft Final CMS Rpt to Agencies	8.1.04.56.92.22	9/13/01	9/13/01	4
34D40470	Q4	Receive OEPA Comments to X-334 Draft Final CMS Report	8.1.04.56.92.22	12/12/01	12/12/01	4
34D40471	Q4	Receive USEPA Comments to X-334 Draft Final CMS Report	8.1.04.56.92.22	12/12/01	12/12/01	4
34D40480	Q4	Receive Public Comments to X-334 Draft Final CMS Report	8.1.04.56.92.22	3/12/02	3/12/02	4
34D40496	Q4	Receive OEPA Approval X-334 Final CMS Report	8.1.04.56.92.22	6/20/02	6/20/02	4
34D40498	Q4	Receive USEPA Approval X-334 Final CMS Report	8.1.04.56.92.22	6/20/02	6/20/02	4
34D41301	Q4	Start X-334 Title I/II Design	8.1.04.56.94.20	4/2/03	4/2/03	4
34D41350	Q4	Deliver X-334 90% Design Package to DOE	8.1.04.56.94.20	7/30/03	7/30/03	4
34D41390	Q4	Submit X-334 CFC Package to Agencies	8.1.04.56.94.20	8/31/03	8/31/03	4
34D41425	Q4	Receive OEPA Approval X-334 CFC Package	8.1.04.56.94.20	12/30/03	12/30/03	4
34D41430	Q4	Receive USEPA Approval X-334 CFC Package	8.1.04.56.94.20	12/30/03	12/30/03	4
34D41505	Q4	Deliver X-334 Construction Certification Rpt to DOE	8.1.04.56.94.28	10/12/04	10/12/04	4
34D41520	Q4	Submit X-334 Construction Certification Rpt to DOE	8.1.04.56.94.28	11/11/04	11/11/04	4
34D41440	Q4	Award X-334 Remedial Action Contract	8.1.04.56.94.24	1/11/04	1/11/04	4
M2015102fS	& M	- Quarterly Report	8.2.01.51.20.01	12/30/99	12/30/99	4
M2015102fS	& M	- Quarterly Report	8.2.01.51.20.01	3/30/00	3/30/00	4
M2015103fS	& M	- Quarterly Report	8.2.01.51.20.01	6/30/00	6/30/00	4
M2015103fS	& M	- Annual Report to DoE	8.2.01.51.20.01	9/29/00	9/29/00	4
M20151024S	& M	- Quarterly Report	8.2.01.51.20.01	12/30/98	12/30/98	4
M2015102fS	& M	- Quarterly Report	8.2.01.51.20.01	3/30/99	3/30/99	4
M2015102fS	& M	- Quarterly Report	8.2.01.51.20.01	6/30/99	6/30/99	4
M20151027S	& M	- Annual Report to DoE	8.2.01.51.20.01	9/29/99	9/29/99	4
M2015102fS	& M	- Quarterly Report	8.2.01.51.20.01	12/30/97	12/30/97	4
M2015102fS	& M	- Quarterly Report	8.2.01.51.20.01	3/30/98	3/30/98	4
M20151022S	& M	- Quarterly Report	8.2.01.51.20.01	6/30/98	6/30/98	4
M20151023S	& M	- Annual Report to DoE	8.2.01.51.20.01	9/29/98	9/29/98	4
M2015101fS	& M	- Quarterly Report	8.2.01.51.20.01	12/30/96	12/30/96	4
M2015101fS	& M	- Quarterly Report	8.2.01.51.20.01	3/30/97	3/30/97	4
M2015101fS	& M	- Quarterly Report	8.2.01.51.20.01	6/30/97	6/30/97	4
M2015101fS	& M	- Annual Report to DoE	8.2.01.51.20.01	9/29/97	9/29/97	4
M2015101fS	& M	- Quarterly Report	8.2.01.51.20.01	12/30/95	12/30/95	4
M20151012S	& M	- Quarterly Report	8.2.01.51.20.01	3/30/96	3/30/96	4
M20151013S	& M	- Quarterly Report	8.2.01.51.20.01	6/30/96	6/30/96	4
M20151014S	& M	- Annual Report to DoE	8.2.01.51.20.01	9/29/96	9/29/96	4
M2015220fD	& D	Design - Issue CFC Design	8.2.01.52.20.10	10/15/95	10/15/95	4
M2015230fD	& D	Contract Award	8.2.01.52.20.10	10/16/95	10/16/95	4
M20152302Start	X-705A	Building Demo - 1a	8.2.01.52.20.20.02	11/21/95	11/21/95	4
M2015212fAnalysis	Report Submitted to MMES & Others		8.2.01.52.20.20.01	11/20/95	11/20/95	4
M20152301NCSA	Approval		8.2.01.52.20.10	11/20/95	11/20/95	4
M2015211fStart	X-705A Asbestos/Equip Removal		8.2.01.52.20.20.01	8/15/95	8/15/95	4
M2015211fAsbestos	Removal Notification to OEPA		8.2.01.52.20.20.01	7/31/95	7/31/95	4
M20152102Notice	to Proceed (NTP)		8.2.01.52.20.20.01	7/17/95	7/17/95	4
M2015230fEnd	X-705A Building Demo - 1a		8.2.01.52.20.20.02	12/20/95	12/20/95	4
M2015211fEnd	X-705A Asbestos/Equip Removal		8.2.01.52.20.20.01	10/15/95	10/15/95	4
M20152311fD	& D Contract Award Phase 2 - 1b		8.2.01.52.20.10	12/7/95	12/7/95	4
M2015231fStart	X-705A Building Demo Phase 2 - 1b		8.2.01.52.20.20.02	12/7/95	12/7/95	4
M20152321fEnd	X-705A Building Demo Phase 2 - 1b		8.2.01.52.20.20.02	12/20/95	12/20/95	4
M2015232fStart	X-705A Building Demo Phase 2 - 2a		8.2.01.52.20.20.02	1/22/96	1/22/96	4
M20152333fEnd	X-705A Building Demo Phase 2 - 2a		8.2.01.52.20.20.02	2/21/96	2/21/96	4
M20152342Start	X-705A Building Demo Phase 2 - 2b		8.2.01.52.20.20.02	2/21/96	2/21/96	4
M2015234fEnd	X-705A Building Demo Phase 2 - 2b		8.2.01.52.20.20.02	4/2/96	4/2/96	4
M20152354Start	X-705A Building Demo Phase 2 - 2c		8.2.01.52.20.20.02	4/3/96	4/3/96	4
M2015235fEnd	X-705A Building Demo Phase 2 - 2c		8.2.01.52.20.20.02	5/30/96	5/30/96	4
31A19445	Q1	Start Sitewide Surface Drng Remedial Action	8.1.01.52.08.26.01	8/13/02	8/13/02	5
31A19455	Q1	Sitewide Surface Drng Remedial Action Complete	8.1.01.52.08.26.01	4/3/04	4/3/04	5
P60302P11fPERFORM	RADIOLOGICAL EVALUATION OF WASTE		8.6.03.02	12/31/96	12/31/96	4
P60304400fTRANSPORTATION	& DISPOSAL		8.6.03.04.04.16	8/1/96	7/31/96	4
P60302P20fSCHEDULE	FOR REPACKAGING WASTE		8.6.03.02	9/30/96	9/30/96	4
31A47105	Deliver Draft BSI Rpt to DOE		8.1.01.50.14.08	9/9/95	9/9/95	4
33C54070	Q3	Deliver X-740 Draft Final CMS Rpt to DOE	8.1.03.54.02.22	6/15/03	6/15/03	4
33C54100	Q3	Receive Agencies Cmnts to X-740 Draft Final CMS Rpt	8.1.03.54.02.22	8/26/03	8/26/03	4
33C54115	Q3	Receive Public Cmnts X-740 Draft Final CMS Rpt	8.1.03.54.02.22	9/25/03	9/25/03	4
33C54125	Q3	Deliver X-740 Final CMS Rpt to DOE	8.1.03.54.02.22	10/14/03	10/14/03	4
33C54155	Q3	Receive OEPA Approval X-740 Final CMS Rpt	8.1.03.54.02.22	12/25/03	12/25/03	4
33C54160	Q3	Receive USEPA Approval X-740 Final CMS Rpt	8.1.03.54.02.22	12/25/03	12/25/03	4
33C54205	Q3	Deliver X-740 Draft CMI Work Plan to DOE	8.1.03.54.02.10	11/6/03	11/6/03	4
33C54245	Q3	Receive OEPA Cmnts to X-740 Draft CMI Work Plan	8.1.03.54.02.10	3/24/04	3/24/04	4
33C54250	Q3	Receive USEPA Cmnts to X-740 Draft CMI Work Plan	8.1.03.54.02.10	3/24/04	3/24/04	4
33C54295	Q3	Receive OEPA Approval X-740 Final CMI Work Plan	8.1.03.54.02.10	8/21/04	8/21/04	4
33C54297	Q3	Receive USEPA Approval X-740 Final CMI Work Plan	8.1.03.54.02.10	8/21/04	8/21/04	4
33C54026	Q3	Receive OEPA Cmnts to X-740 Draft CMS Rpt	8.1.03.54.02.22	6/10/03	6/10/03	4
33C54031	Q3	Receive USEPA Cmnts to X-740 Draft CMS	8.1.03.54.02.22	6/10/03	6/10/03	4
34D53112	Q4	Receive X-611A NEPA Approval	8.1.04.52.04.08.20	2/3/96	2/3/96	4
34D53232	Q4	Receive PTI/PTO	8.1.04.52.04.08.26	6/22/96	6/22/96	4
M20152303D	& D Readiness Review		8.2.01.52.20.20.02	11/21/95	11/21/95	4
M2015231fNCSA	Approval Phase 2 - 1b		8.2.01.52.20.10	12/6/95	12/6/95	4
M2015231fD	& D Readiness Review Phase 2 - 1b		8.2.01.52.20.20.02	12/7/95	12/7/95	4
M20152323D	& D Contract Award Phase 2 - 2a		8.2.01.52.20.10	1/7/96	1/7/96	4
M2015233fD	& D Contract Award Phase 2 - 2b		8.2.01.52.20.10	2/21/96	2/21/96	4
M2015234fD	& D Contract Award Phase 2 - 2c		8.2.01.52.20.10	4/3/96	4/3/96	4

Table B-1. Environmental Restoration Deliverables

Phase	Description	Date
DELIVERABLES FROM 1989 - PRESENT		
RFI	Q3 Submit Draft RFI Report to Agencies	10-Dec-9
RFI	Deliver Draft Air RFI Work Plan to DOE	14-Jan-
CMS	Q3 Submit Quad-Wide Draft CMS Work Plan to Agencies	10-Mar-9
RFI	Q4 Deliver Draft RFI Report to DOE	13-Aug-9
RFI	Q4 Submit Quad-Wide Draft RFI Report to Agencies	27-Aug-9
RFI	Submit Final Air RFI Work Plan to Agencies	08-Oct-
CMS	Q4 Deliver Draft CMS Work Plan to DOE	02-Nov-9
CMS	Q4 Submit Quad-Wide Draft CMS Work Plan to Agencies	23-Nov-9
CMS	Q2 Deliver Quad-Wide Draft CMS Report to DOE	18-Jan-
CMS	Q2 Submit X-705A/B Draft CMS Report to Agencies	01-Mar-9
CMS	Q2 Submit Quad-Wide Draft CMS Report to Agencies	02-Mar-9
CMS	Q2 Submit X-701B Groundwater Draft CMS Report to Agencies	02-Mar-9
CMS	Q1 Deliver Quad-Wide Draft CMS Report to DOE	15-Mar-9
RFI	Q1 Deliver Phase II Draft RFI Report to DOE	06-May-9
RFI	Q2 Deliver Phase II Draft RFI Report to DOE	06-May-9
WM-DISP	Off Site RCRA/MW Disposal - Complete Initial Envirocare Shipment	08-May-9
CMS	Q1 Submit Quad-Wide Draft CMS Report to Agencies	11-May-9
CMS	Deliver Draft ULB BRC Watersheds Report to DOE	22-May-9
WM-STOR	Contaminated Scrap Metal Packaging Facility - Initiate Scoping	01-Jun-
WM-STOR	Office\Changehouse - Initiate Scoping	01-Jun-
CMS	Q1 Submit X-749/120 Draft CMS Report to Agencies	02-Jun-
RFI	Q1 Submit Phase II Draft RFI Report to Agencies	20-Jun-
RFI	Q2 Submit Phase II Draft RFI Report to Agencies	20-Jun-
CMS	Submit Draft ULB BRC Watersheds Report to Agencies	07-Jul-
CMS	Q4 Submit X-611A Draft CMS Report to Agencies	19-Jul-
CMS	Q1 Submit PKLF Draft CMS Report Agencies	29-Jul-
WM-DISP	Complete Evaluation of Landfill Disposal Options/Final Recommendations	30-Jul-
WM-STOR	LDR FFCA - Submit Draft Site Treatment Plan to DOE	31-Aug-9
WM-DISP	Complete Waste Acceptance Criteria for Shipments of MW & LLW	30-Sep-
CMS	Deliver Site-Wide Draft BERA Report to DOE	17-Oct-
WM-DISP	Solid Waste Landfill - Initiate Design	01-Nov-9
CMS	Submit Draft Background Sampling Investigation Report to Agencies	04-Nov-9
CMS	Submit Site-Wide Draft BERA Draft Report to Agencies	06-Dec-9
WM-DISP	Relief from Off Site Shipment Moratorium for Surface Contaminates	31-Dec-9
WM-STOR	Containerized Sludge Repackaging - Initiate Scoping	01-Jan-
CMS	Q3 Deliver Final CMS Work Plan to DOE	13-Jan-
CMS	Q3 Submit Quad-Wide Final CMS Work Plan to Agencies	20-Jan-
RFI	Deliver Draft Air RFI Report to DOE	27-Jan-
CMS	Q4 Deliver Draft CMS Report to DOE	08-Feb-
RFI	Submit Air RFI Draft Report to Agencies	28-Feb-
CMS	Q3 Deliver Draft CMS Report to DOE	28-Feb-
WM-STOR	LDR FFCA - Submit Final Site Treatment Plan to DOE	03-Apr-
CMS	Q4 Submit Quad-Wide Draft CMS Report to Agencies	14-Apr-
CMS	Q3 Submit Quad-Wide Draft CMS Report to Agencies	20-Apr-
CMI	Q4 Verification of Clean or Contaminated Closure	18-May-9
WM-DISP	Ship 500k lbs of Low Level Waste (LLW) to Hanford	20-Jun-
WM-STOR	Initiate PCB Empty Container Reduction Program	29-Jun-
D&D	D & D Initiation - X-705A	17-Jul-
CMS	Q1 Submit PKLF Final CMS Report to Agencies	08-Aug-9
CMS	Q2 Submit X-705A/B Final CMS Report to Agencies	08-Aug-9
WM-DISP	Ship 500k lbs of Waste to Envirocare	09-Sep-
WM-TREAT	Ship 172k lbs of Liquid Waste to K-25 Incinerator	30-Sep-
EXPECTED DELIVERABLES FOR EXECUTION AND OUT YEARS		
WM-STOR	Implement Storage Bar-code Reader Program	01-Oct-
WM-DISP	Finalize Open Shipment Certification Issue of Training	01-Oct-
S&M	S&M Quarterly Report	13-Oct-

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Table B-1. Environmental Restoration Deliverables

Phase	Description	Date
CMS	Deliver Draft Site-Wide Human Health RA Report to DOE -Prelim 5-15-95	04-Nov-95
CMS	Submit Site-Wide Draft Human Health Report to Agencies	19-Dec-95
S&M	S&M Quarterly Report	12-Jan-96
GW	Submit RCRA Subtitle C Monitoring Report	01-Mar-96
GW	Submit RCRA Subtitle D Monitoring Report	01-Mar-96
GW	Submit Annual Electronic Data in GRITS/STAT Format	01-Mar-96
GW	Submit Annual RCRA Report: Graphical and Tab Data	01-Mar-96
CMS	Q4 Deliver X-611A Final CMS Report to DOE	03-Mar-96
CMI	Q1 X-749/120 Pilot Scale Facility Operational	05-Mar-96
CMS	Q4 Deliver X-611A Draft CMI Work Plan to DOE	28-Mar-96
WM-DISP	Complete Repackaging of Gas Cylinders	30-Sep-96
CMS	Q4 Submit X-611A Final CMS Report to Agencies	01-Apr-96
CMS	Q2 Submit X-705A/B Draft CMI Work Plan to DOE	03-Apr-96
CMS	Q1 Deliver PKLF Draft CMI Work Plan to DOE	04-Apr-96
GW	Submit Solid Waste Annual Groundwater Monitoring Report	05-Apr-96
S&M	S&M Quarterly Report	12-Apr-96
CMS	Q4 Submit X-611A Draft CMI Work Plan to Agencies	16-May-96
CMS	Q2 Submit X-705A/B Draft CMI Work Plan to Agencies	22-May-96
CMS	Q1 Submit PKLF Draft CMI Work Plan to Agencies	23-May-96
CMI	Q2 Start X-705A/B Remedial Action	27-May-96
D&D	D & D Close Out - X-705A	30-May-96
CMS	Q1 Deliver West Drainage Ditch Draft CMS Report to DOE	29-Jun-96
CMS	Q4 Deliver X-611A Final CMI Work Plan to DOE	12-Jul-96
S&M	S&M Quarterly Report	12-Jul-96
S&M	X-231 Condensate Drain - Complete	19-Jul-96
CMS	Q1 Deliver 5-Unit Groundwater Draft CMS Report to DOE	10-Aug-96
RFI	Q1 Submit Quad-Wide Final RFI Report to DOE	11-Aug-96
CMS	Q1 Submit West Drainage Ditch Draft CMS Report to Agencies	17-Aug-96
CMI	Q3 Remedial Action/Closure End - X-740 Facility	30-Aug-96
CMS	Q4 Submit X-611A Final CMI Work Plan to Agencies	30-Aug-96
S&M	X-749A Drainage - Complete	30-Aug-96
CMS	Q2 Submit X-705A/B Final CMI Work Plan to Agencies	19-Sep-96
CMS	Q1 Submit PKLF Final CMI Work Plan to Agencies	20-Sep-96
S&M	X-749 Drainage - Complete	27-Sep-96
CMS	Q1 Submit 5-Unit Groundwater Draft CMS Report Agencies	28-Sep-96
RFI	Q1 Submit Quad-Wide Final RFI Report to Agencies	29-Sep-96
CMI	Q2 Remedial Action Complete X-705A/B	30-Sep-96
CMI	Q4 X-611A Interim Remedial Action Complete	30-Sep-96
WM-TREAT	Ship 100k lbs of Liquid Waste to K-25 Incinerator	30-Sep-96
WM-STOR	Ship 150k lbs of Heavy Metal Sludge for Treatment	30-Sep-96
WM-STOR	Highly Enriched Uranium Waste - Complete Characterization of 6 Waste Storage	30-Sep-96
WM-STOR	Deactivate Reactive Metals (DRM) Procure Contract with Vendor	30-Sep-96
WM-STOR	Complete Shipment of Fluorescent Bulb Inventory for Recycling	30-Sep-96
WM-STOR	Complete Cover Installation for X-3346 & X7745 Storage Pads	30-Sep-96
WM-DISP	Ship 2M lbs RCRA/Rad Waste to Envirocare	30-Sep-96
WM-DISP	Ship 480k lbs Low Level Waste to Hanford	30-Sep-96
RFI	Q3 Submit Quad-Wide Final RFI Report to Agencies	23-Nov-96
CMS	Q2 Submit X-230J7 Draft CMS Report to Agencies	03-Dec-96
CMS	Q1 Deliver X-231B Draft CMS Report to DOE	11-Dec-96
CMS	Q2 Deliver X-701B Soil Final CMS Report to DOE	27-Dec-96
CMS	Q1 Deliver West Drainage Ditch Final CMS Report to DOE	20-Jan-97
CMS	Q1 Submit X-231B Draft CMS Report Agencies	29-Jan-97
CMS	Q2 Submit X-701B Soil Final CMS Report to Agencies	14-Feb-97
RFI	Q2 Submit Quad-Wide RFI Final Report to Agencies	21-Feb-97
CMS	Q1 Deliver X-231A Draft CMS Report to DOE	22-Feb-97
CMS	Q1 Deliver Site-Wide Surface Drainage Draft CMS Report to DOE	27-Feb-97
CMS	Q1 Submit West Drainage Ditch Final CMS Report to Agencies	10-Mar-97
CMS	Q2 Deliver X-744Y/G Soil Draft CMS Report to DOE	10-Mar-97

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Table B-1. Environmental Restoration Deliverables

Phase	Description	Date
CMS	Q1 Deliver X-749/120 Final CMS Report to DOE	11-Mar-9
CMS	Q2 Deliver X-701B Soil Draft CMI Work Plan to DOE	12-Mar-9
WM-STOR	Deactivate Reactive Metals - Initiate Construction for Vendor Operations	15-Mar-9
WM-STOR	Cyanide Destruction at Y-12 - Receive Site Agreement	31-Mar-9
WM-STOR	Mercury Processing at INLET - Receive Site Agreement	31-Mar-9
CMS	Q1 Submit X-749/120 Final CMS Report to Agencies	01-Apr-9
CMS	Q1 Deliver West Drainage Ditch Draft CMI Work Plan to DOE	05-Apr-9
CMS	Q1 Submit X-231A Draft CMS Report Agencies	12-Apr-9
CMS	Q1 Submit Site-Wide Surface Drainage Draft CMS Report to Agencies	17-Apr-9
CMS	Q1 Deliver X-749/120 Draft CMI Work Plan to DOE	18-Apr-9
CMS	Q2 Submit X-744Y/G Soil Draft CMS Report to Agencies	28-Apr-9
CMS	Q2 Submit X-701B Soil Draft CMI Work Plan to Agencies	30-Apr-9
CMS	Q1 Submit West Drainage Ditch Draft CMI Work Plan to Agencies	24-May-9
CMS	Q2 Deliver X-230J7 Final CMS Report to DOE	28-May-9
CMS	Q1 Submit X-749/120 Draft CMI Work Plan to Agencies	01-Jun-9
RFI	Q4 Submit Quad-Wide Final RFI Report to Agencies	21-Jun-9
CMS	Q2 Submit X-230J7 Final CMS Report to Agencies	06-Jul-9
RFI	Submit Final Air RFI Report to Agencies	26-Jul-9
CMS	Q2 Deliver 7-Unit Area Final CMS Report to DOE	10-Aug-9
CMS	Q1 Submit X-749/120 Final CMI Work Plan to Agencies	15-Aug-9
CMS	Q1 Deliver 5-Unit Groundwater Final CMS Report to DOE	19-Aug-9
CMS	Q2 Deliver X-701B GROUNDWATER Final CMS Report to DOE	24-Aug-9
WM-STOR	Containerized Sludge Repackaging - Repackaging Complete	26-Aug-9
CMS	Q2 Deliver X-230J7 Draft CMI Work Plan to DOE	27-Aug-9
CMS	Q2 Submit X-701B Soil Final CMI Work Plan to Agencies	28-Aug-9
CMS	Q2 Submit 7-Unit Area Final CMS Report to Agencies	17-Sep-9
CMS	Q1 Submit West Drainage Ditch Final CMI Work Plan to Agencies	21-Sep-9
WM-TREAT	Ship Liquid Waste to K-25 Incinerator Per Burn Plan	30-Sep-9
WM-STOR	(DRM) Commence Systems Testing	30-Sep-9
WM-DISP	Ship 2M lbs RCRA/Rad Waste to Envirocare	30-Sep-9
WM-DISP	Ship LLW to Hanford - Balance of Lot 1/2 Drums	30-Sep-9
CMS	Q2 Submit X-701B GROUNDWATER Final CMS Report to Agencies	02-Oct-9
CMS	Q2 Submit X-230J7 Draft CMI Work Plan to Agencies	04-Oct-9
CMS	Q1 Submit 5-Unit Groundwater Final CMS Report to Agencies	07-Oct-9
CMS	Q2 Deliver X-701B GROUNDWATER Draft CMI Work Plan to DOE	28-Oct-9
CMS	Q1 Deliver Site-Wide Surface Drainage Final CMS Report to DOE	04-Nov-9
CMS	Q2 Deliver 7-Unit Area Draft CMI Work Plan to DOE	08-Nov-9
CMI	Q1 Start X-749/120 Remedial Action	10-Nov-9
CMS	Q2 Deliver X-230J7 Final CMI Work Plan to DOE	27-Nov-9
CMS	Q1 Deliver X-231B Final CMS Report to DOE	29-Nov-9
CMS	Q1 Deliver 5-Unit Groundwater Draft CMI Work Plan to DOE	02-Dec-9
CMS	Q1 Deliver X-231A Final CMS Report to DOE	15-Dec-9
CMS	Q2 Submit X-701B GROUNDWATER Draft CMI Work Plan to Agencies	16-Dec-9
CMS	Q2 Submit 7-Unit Area Draft CMI Work Plan to Agencies	16-Dec-9
CMS	Q1 Submit Site-Wide Surface Drainage Final CMS Report to Agencies	23-Dec-9
WM-STOR	Mercury Processing - Initiate Preparation of Wastes for Shipment	31-Dec-9
WM-STOR	On-Site X-705 Micro Filtration - commence Operations	31-Dec-9
WM-STOR	(DRM) Commence Operations	31-Dec-9
CMS	Q1 Submit X-231B Final CMS Report to Agencies	01-Jan-9
CMS	Q2 Submit X-230J7 Final CMI Work Plan to Agencies	04-Jan-9
CMS	Q1 Deliver Site-Wide Surface Drainage Draft CMI Work Plan to DOE	18-Jan-9
CMS	Q1 Submit 5-Unit Groundwater Draft CMI WP to Agencies	20-Jan-9
CMS	Q1 Deliver X-231B Draft CMI Work Plan to DOE	27-Jan-9
CMS	Q1 Submit X-231A Final CMS Report to Agencies	02-Feb-9
CMS	Q2 Deliver 7-Unit Area Final CMI Work Plan to DOE	08-Feb-9
CMS	Q1 Deliver X-231A Draft CMI Work Plan to DOE	28-Feb-9
CMS	Q1 Submit Site-Wide Surface Drainage Draft CMI WP to Agencies	08-Mar-9
CMS	Q1 Submit X-231B Draft CMI Work Plan to Agencies	17-Mar-9

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Table B-1. Environmental Restoration Deliverables

Phase	Description	Date
CMS	Q2 Submit 7-Unit Area Final CMI Work Plan to Agencies	18-Mar-9
WM-STOR	X-705 - Complete Processing of X-705 Mixed Waste Stream	31-Mar-9
CMS	Q2 Submit X-701B GROUNDWATER Final CMI Work Plan to Agencies	15-Apr-9
CMS	Q1 Submit X-231A Draft CMI Work Plan to Agencies	18-Apr-9
CMS	Q1 Submit 5-Unit Groundwater Final CMI WP to Agencies	20-May-9
CMS	Q2 Deliver X-744Y/G Soil Final CMS Report to DOE	02-Jun-9
CMS	Q1 Submit X-231B Final CMI Work Plan to Agencies	15-Jun-9
WM-STOR	(DRM) Complete Processing of (DRM) Waste Stream	30-Jun-9
CMS	Q1 Submit X-231A Final CMI Work Plan to Agencies	02-Jul-9
CMS	Q1 Submit Site-Wide Surface Drainage Final CMI WP to Agencies	06-Jul-9
CMS	Q2 Submit X-744Y/G Soil Final CMS Report to Agencies	21-Jul-9
CMS	Q2 Deliver X-744Y/G Soil Draft CMI Work Plan to DOE	16-Aug-9
WM-TREAT	Ship Liquid Waste to K-25 Incinerator per Burn Plan	30-Sep-9
WM-STOR	Cyanide Destruction - Initiate Shipment of Waste for Treatment at Y-12	30-Sep-9
WM-DISP	Ship Balance of 701-B Soils RCRA/RAD Waste to Envirocare	30-Sep-9
WM-DISP	Ship 480k lbs - B25 Boxes - LLW to Hanford	30-Sep-9
CMS	Q2 Submit X-744Y/G Soil Draft CMI WP to Agencies	04-Oct-9
CMS	Q2 Start X-701B Soil Remedial Action	08-Oct-9
WM-STOR	HEUW-Submittal of Plan to Address Treatment of HEU Mixed Wastes	31-Dec-9
WM-STOR	Mercury Processing - Complete Shipment of Waste Stream for Off-Site Treatment	31-Dec-9
WM-STOR	Recycling Lead Containing Materials - Receive Site Agreement	31-Dec-9
CMS	Q2 Submit X-744Y/G Soil Final CMI WP to Agencies	01-Feb-9
CMS	Q2 X-701B Soil Remedial Action Complete	09-Jun-9
CMI	Q1 Start West Drainage Ditch Remedial Action	23-Jun-9
WM-STOR	Carbon Regeneration - Submit Permit Applications to Appropriate Agencies	30-Jun-9
CMI	Q2 Start X-701B Groundwater Remedial Action	15-Aug-9
WM-TREAT	Ship Liquid Wastes to K-25 Incinerator, per Burn Plan	30-Sep-9
WM-STOR	Complete Shipment of Liquid Mixed Waste Inventory to TSCA Incinerator	30-Sep-9
WM-DISP	Ship 500k lbs of Low Level Waste to Hanford	30-Sep-9
CMI	Q1 X-749/120 Remedial Action Complete	30-Oct-9
WM-STOR	Groundwater Aqueous Treatment - Complete Processing of Waste Stream	31-Dec-9
WM-STOR	Future Incin -Determine Adapt Need for Commercially Available Treatment	31-Dec-9
WM-STOR	Carbon Regeneration - Procure Contract with Vendor	31-Mar-0
WM-STOR	Lab Pack Treat - Receive Site Agreement	31-Mar-0
CMS	Q2 Deliver X-747G Final CMS Report to DOE	01-Jun-9
WM-STOR	Lab Pack Treat - Initiate Shipment of Wastes for Treatment	30-Jun-9
CMS	Q3 Deliver X-230J5 Final CMS Report to DOE	02-Jul-9
CMI	Q2 Start X-744Y/G Soil Remedial Action	13-Jul-9
CMS	Q2 Submit X-747G Final CMS Report to Agencies	20-Jul-9
CMS	Q2 Deliver X-747G Draft CMI Work Plan to DOE	15-Aug-0
CMS	Q3 Submit X-230J5 Final CMS Report to Agencies	20-Aug-0
CMS	Q3 Deliver X-230J5 Draft CMI Work Plan to DOE	15-Sep-9
WM-TREAT	Ship Liquid Wastes to K-25 Incinerator, per Burn Plan	30-Sep-9
WM-STOR	Carbon Regeneration - Initiate Construction Necessary for Vendor Operations	30-Sep-9
WM-STOR	Future Incin - Submittal of Plan for Treatment of Waste Stream	30-Sep-9
WM-STOR	Stabilization - Submit Permit Application to Appropriate Agencies	30-Sep-9
WM-DISP	Ship 1M lbs of Low Level Waste to Hanford	30-Sep-9
D&D	D & D Initiation - X-615	01-Oct-9
CMS	Q2 Submit X-747G Draft CMI WP to Agencies	03-Oct-9
CMI	Q2 X-701B Groundwater Remedial Action Complete	01-Nov-0
CMS	Q3 Submit X-230J5 Draft CMI WP to Agencies	03-Nov-0
CMI	Q1 Start X-231A Soil Remedial Action	05-Nov-0
WM-STOR	Cyanide Destruction - Complete Shipment of Waste Stream for Off Site Treatment	31-Dec-0
WM-STOR	Stabilization On Site - Procure Contract with Vendor	31-Dec-0
WM-STOR	Metal Recovery - Determine Adapt Need for Commercially Available Treatment	31-Dec-0
WM-STOR	Phys Chem Treat - Determine Adapt Need for Commercial Available Treatment	31-Dec-0
CMS	Q2 Submit X-747G Final CMI WP to Agencies	31-Jan-9
CMI	Q1 West Drainage Ditch Remedial Action Complete	11-Feb-9

These Scheduled Deliverables accurately reflect PORTS Current Baseline,
but do not incorporate Vision 2010

Table B-1. Environmental Restoration Deliverables

Phase	Description	Date
CMS	Q3 Submit X-230J5 Final CMI WP to Agencies	03-Mar-0
CMS	Q2 Deliver X-701C Soil Draft CMS Report to DOE	10-Mar-0
WM-STOR	Stabilization - Initiate Construction Necessary for Vendor Operations	31-Mar-0
CMS	Q2 Submit X-701C Soil Draft CMS Report to Agencies	28-Apr-0
CMS	Q2 Deliver Process Waste Lines Final CMS Report to DOE	01-Jun-0
CMI	Q1 X-231A Soil Remedial Action Complete	07-Jul-0
CMI	Q1 Start 5-Unit Groundwater Remedial Action	13-Jul-0
CMI	Q1 Start Peter Kiewit Landfill Remedial Action	13-Jul-0
CMS	Q2 Submit Process Waste Lines Final CMS Report to Agencies	20-Jul-0
CMI	Q1 Start X-231B Soil Remedial Action	02-Aug-0
CMS	Q2 Deliver Process Waste Lines Draft CMI Work Plan to DOE	15-Aug-0
CMI	Q2 Start 7-Unit Area Groundwater Plume Remedial Action	01-Sep-0
WM-TREAT	Ship Liquid Waste to K-25 Incinerator per Burn Plan	30-Sep-0
WM-STOR	Metal Recovery - Submittal of Plan for Treatment of Mixed Wastes	30-Sep-0
WM-STOR	Phys Chem Treat - Submittal of Plan for Treatment of Mixed Wastes	30-Sep-0
WM-STOR	Lab Pack - Complete Shipment of the PORTS Mixed Waste Inventory	30-Sep-0
WM-STOR	Carbon Regeneration - Commence System Testing	30-Sep-0
WM-STOR	Stabilization- Commence System Testing	30-Sep-0
WM-DISP	Ship 1M lbs of Low Level Waste to Hanford	30-Sep-0
CMS	Q2 Submit Process Waste Lines Draft CMI WP to Agencies	03-Oct-0
CMS	Q3 Submit X-230J5 CFC Package to Agencies	30-Nov-0
WM-STOR	Carbon Regeneration - Commence Operations	31-Dec-0
CMI	Q2 X-744Y/G Soil Remedial Action Complete	08-Jan-0
CMS	Q2 Submit Process Waste Lines Final CMI WP to Agencies	31-Jan-0
CMI	Q2 Start X-720 Soil Remedial Action	12-Mar-0
CMI	Q2 Start X-747G Remedial Action	13-Mar-0
CMI	Q1 5-Unit Groundwater Remedial Action Complete	14-Mar-0
CMI	Q1 Peter Kiewit Landfill Remedial Action Complete	14-Mar-0
CMS	Q4 Deliver X-334 Final CMS Report to DOE	02-Apr-0
CMI	Q1 X-231B Soil Remedial Action Complete	03-Apr-0
CMI	Q3 Start X-230J5 Remedial Action	13-Apr-0
CMS	Q4 Submit X-334 Final CMS Report to Agencies	21-May-0
CMS	Q2 Deliver X-701C Soil Final CMS Report to DOE	02-Jun-0
CMS	Q2 Deliver X-633 Final CMS Report to DOE	02-Jun-0
CMS	Q4 Deliver X-334 Draft CMI Work Plan to DOE	16-Jun-0
CMI	Q2 Start X-230J7 Remedial Action	13-Jul-0
CMS	Q2 Submit X-701C Soil Final CMS Report to Agencies	21-Jul-0
CMS	Q2 Submit X-633 Final CMS Report to Agencies	21-Jul-0
CMS	Q4 Submit X-334 Draft CMI WP to Agencies	04-Aug-0
CMS	Q2 Deliver X-701C Soil Draft CMI Work Plan to DOE	16-Aug-0
CMS	Q2 Deliver X-633 Draft CMI Work Plan to DOE	16-Aug-0
CMI	Q2 Start X-705 Remedial Action	11-Sep-0
WM-TREAT	Ship Liquid Waste to K-25 Incinerator per Burn Plan	30-Sep-0
WM-STOR	Stabilization - Commence Operations	30-Sep-0
CMS	Q2 Submit X-701C Soil Draft CMI WP to Agencies	04-Oct-0
CMS	Q2 Submit X-633 Draft CMI WP to Agencies	04-Oct-0
D&D	D & D Close-Out - X-615	16-Oct-0
CMI	Q2 X-720 Soil Remedial Action Complete	11-Nov-0
CMI	Q2 X-747G Remedial Action Complete	12-Nov-0
CMI	Q2 7-Unit Area Groundwater Plume Remedial Action Complete	24-Nov-0
CMS	Q4 Submit X-334 Final CMI WP to Agencies	02-Dec-0
CMI	Q3 X-230J5 Remedial Action Complete	13-Dec-0
CMS	Q2 Submit X-701C Soil Final CMI WP to Agencies	01-Feb-0
CMS	Q2 Submit X-633 Final CMI WP to Agencies	01-Feb-0
CMI	Q2 Start Process Waste Lines Remedial Action	13-Mar-0
CMI	Q2 X-230J7 Remedial Action Complete	14-Mar-0
CMS	Q2 Deliver X-705 Final CMS Report to DOE	02-Apr-0
CMS	Q3 Submit X-740 Draft CMS Report to Agencies	27-Apr-0

These Scheduled Deliverables accurately reflect PORTS Current Baseline,
but do not incorporate Vision 2010

Table B-1. Environmental Restoration Deliverables

Phase	Description	Date
CMI	Q2 X-705 Remedial Action Complete	13-May-0
CMS	Q2 Submit X-705 Final CMS Report to Agencies	21-May-0
CMS	Q2 Deliver X-705 Draft CMI Work Plan to DOE	16-Jun-
CMS	Q3 Submit X-740 Draft Final CMS Report to Agencies	27-Jul-
CMS	Q2 Submit X-705 Draft CMI WP to Agencies	04-Aug-0
CMI	Q2 Process Waste Lines Remedial Action Complete	12-Nov-0
CMS	Q3 Submit X-740 Final CMS Report to Agencies	25-Nov-0
CMS	Q2 Submit X-705 Final CMI WP to Agencies	02-Dec-0
CMS	Q3 Submit X-740 Draft CMI Work Plan to Agencies	25-Dec-0
CMI	Q4 Start X-334 Remedial Action	12-Jan-
CMS	Q2 Deliver X-700 Soil Final CMS Report to DOE	01-Feb-
CMI	Q2 Start X-633 Remedial Action	13-Mar-0
CMS	Q2 Submit X-700 Soil Final CMS Report to Agencies	21-Mar-0
CMS	Q2 Deliver X-720 Soil Final CMS Report to DOE	01-Apr-
CMS	Q4 Deliver X-734 Final CMS Report to DOE	01-Apr-
CMS	Q2 Deliver X-700 Soil Draft CMI Work Plan to DOE	16-Apr-
CMS	Q3 Submit X-740 Final CMI Work Plan to Agencies	23-Apr-
CMS	Q2 Submit X-720 Soil Final CMS Report to Agencies	20-May-0
CMS	Q4 Submit X-734 Final CMS Report to Agencies	20-May-0
CMS	Q2 Submit X-700 Soil Draft CMI WP to Agencies	04-Jun-
CMS	Q2 Deliver X-720 Soil Draft CMI Work Plan to DOE	15-Jun-
CMS	Q4 Deliver X-734 Draft CMI Work Plan to DOE	15-Jun-
CMS	Q2 Submit X-720 Soil Draft CMI WP to Agencies	03-Aug-0
CMS	Q4 Submit X-734 Draft CMI WP to Agencies	03-Aug-0
CMI	Q4 X-334 Remedial Action Complete	12-Sep-
CMS	Q2 Submit X-700 Soil Final CMI WP to Agencies	02-Oct-
CMS	Q3 Deliver Quad-Wide Final CMS Report to DOE	04-Nov-0
CMI	Q2 X-633 Remedial Action Complete	12-Nov-0
CMS	Q2 Submit X-720 Soil Final CMI WP to Agencies	01-Dec-0
CMS	Q4 Submit X-734 Final CMI WP to Agencies	01-Dec-0
CMS	Q3 Submit Quad-Wide Final CMS Report to Agencies	23-Dec-0
CMS	Q3 Deliver Quad-Wide Draft CMI Work Plan to DOE	18-Jan-
CMS	Q3 Quad-Wide CMS Final Report Approval (ROD)	22-Jan-
CMS	Q3 Submit Quad-Wide Draft CMI Work Plan to Agencies	08-Mar-0
CMS	Q2 Deliver Quad-Wide Final CMS Report to DOE	30-May-0
CMS	Q3 Submit Quad-Wide Final CMI Work Plan to Agencies	06-Jul-
CMI	Q3 Start X-740 Remedial Action	13-Jul-
CMS	Q2 Submit Quad-Wide Final CMS Report to Agencies	18-Jul-
CMS	Q2 Deliver Quad-Wide Draft CMI Work Plan to DOE	13-Aug-0
CMS	Q2 Quad-Wide CMS Final Report Approval (ROD)	17-Aug-0
CMS	Q2 Submit Quad-Wide Draft CMI Work Plan to Agencies	01-Oct-
CMI	Q2 Start X-700 Soil Remedial Action	16-Nov-0
CMI	Q4 Start X-734 Remedial Action	11-Jan-
CMS	Q2 Submit Quad-Wide Final CMI Work Plan to Agencies	29-Jan-
CMS	Q1 Deliver X-600A / X-621 Final CMS Report to DOE	04-Mar-0
CMI	Q3 X-740 Remedial Action Complete	14-Mar-0
CMS	Q1 Deliver X-710 Soil Final CMS Report to DOE	02-Apr-
CMS	Q1 Submit X-600A / X-621 Final CMS Report to Agencies	22-Apr-
CMS	Q1 Deliver X-600A / X-621 Draft CMI Work Plan to DOE	18-May-0
CMS	Q1 Submit X-710 Soil Final CMS Report to Agencies	21-May-0
CMS	Q1 Deliver X-710 Soil Draft CMI Work Plan to DOE	16-Jun-
CMS	Q1 Submit X-600A / X-621 Draft CMI WP to Agencies	06-Jul-
CMI	Q2 X-700 Soil Remedial Action Complete	18-Jul-
CMS	Q1 Submit X-710 Soil Draft CMI WP to Agencies	04-Aug-0
CMS	Q1 Submit X-600A / X-621 Final CMI WP to Agencies	03-Nov-0
CMS	Q1 Submit X-710 Soil Final CMI WP to Agencies	02-Dec-0
CMS	Q1 Deliver X-760 Final CMS Report to DOE	02-Apr-
CMS	Q1 Submit X-760 Final CMS Report to Agencies	21-May-0

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but do not incorporate Vision 2010

Table B-1. Environmental Restoration Deliverables

Phase	Description	Date
CMI	Q4 X-734 Remedial Action Complete	25-May-0
CMS	Q1 Deliver X-760 Draft CMI Work Plan to DOE	16-Jun-
CMS	Q1 Deliver X-600A/X-621 Soil 90% Design Package to DOE	01-Jul-
CMS	Q1 Deliver X-710 90% Design Package to DOE	30-Jul-
CMS	Q1 Submit X-600A/X-621 Soil CFC Package to Agencies	02-Aug-0
CMS	Q1 Submit X-760 Draft CMI WP to Agencies	04-Aug-0
CMS	Q1 Submit X-710 CFC Package to Agencies	31-Aug-0
CMS	Q1 Submit X-760 Final CMI WP to Agencies	02-Dec-0
CMI	Q1 Award X-600A/X-621 Soil Remedial Action Contract	13-Dec-0
CMI	Q1 Start X-600A/X-621 Soil Remedial Action	14-Dec-0
CMI	Q1 Award X-710 Remedial Action Contract	11-Jan-
CMI	Q1 Start X-710 Remedial Action	12-Jan-
CMS	Q1 Deliver Quad-Wide Final CMS Report to DOE	30-May-0
CMS	Q1 Submit Quad-Wide Final CMS Report to Agencies	18-Jul-
CMS	Q1 Deliver X-760 90% Design Package to DOE	29-Jul-
CMI	Q1 Deliver Quad-Wide Draft CMI Work Plan to DOE	13-Aug-0
CMI	Q1 X-600A/X-621 Soil Remedial Action Complete	14-Aug-0
CMS	Q1 Quad-Wide CMS Final Report Approval (ROD)	17-Aug-0
CMS	Q1 Submit X-760 CFC Package to Agencies	30-Aug-0
CMI	Q1 X-710 Remedial Action Complete	12-Sep-
CMI	Q1 Submit Quad-Wide Draft CMI Work Plan to Agencies	01-Oct-
CMI	Q1 Award X-760 Remedial Action Contract	10-Jan-
CMI	Q1 Start X-760 Remedial Action	11-Jan-
CMI	Q1 Submit Quad-Wide Final CMI Work Plan to Agencies	29-Jan-
CMS	Q4 Deliver X-747H Final CMS Report to DOE	02-Aug-0
CMI	Q1 X-760 Remedial Action Complete	12-Sep-
CMS	Q4 Submit X-747H Final CMS Report to Agencies	20-Sep-
CMS	Q4 Deliver X-747H Draft CMI Work Plan to DOE	16-Oct-
CMS	Q4 Submit X-747H Draft CMI WP to Agencies	04-Dec-0
CMS	Q4 Submit X-747H Final CMI WP to Agencies	03-Apr-
CMS	Q4 Deliver Quad-Wide Final CMS Report to DOE	05-Sep-
CMS	Q4 Submit Quad-Wide Final CMS Report to Agencies	24-Oct-
CMS	Q4 Deliver Quad-Wide Draft CMI Work Plan to DOE	19-Nov-1
CMS	Q4 Quad-Wide Final CMS Report Approval (ROD)	23-Nov-1
CMS	Q4 Submit Quad-Wide Draft CMI Work Plan to Agencies	07-Jan-
CMS	Q4 Submit Quad-Wide Final CMI Work Plan to Agencies	07-May-1
CMI	Q4 Start X-747H Remedial Action	14-May-1
CMI	Q4 X-747H Remedial Action Complete	13-Jan-
CMS	Q1 Deliver Site-Wide Draft CMS Report to DOE	02-Jun-
CMS	Q1 Submit Site-Wide Draft CMS Report to Agencies	21-Jul-
CMS	Q1 Deliver Site-Wide Final CMS Report to DOE	24-Aug-1
CMS	Q1 Submit Site-Wide Final CMS Report to Agencies	12-Oct-
CMS	Q1 Deliver Site-Wide Draft CMI Work Plan to DOE	07-Nov-1
CMS	Q1 Submit Site-Wide Draft CMI Work Plan to Agencies	26-Dec-
CMS	Q1 Submit Site-Wide Final CMI Work Plan to Agencies	25-Apr-

APPENDIX - C.
REMEDIAL ACTION DESCRIPTIONS

The ultimate objective of the PORTS ER Program is to remediate contaminated sites and decontaminate and decommission facilities in a safe, cost-effective, and timely manner to maximize the potential for beneficial reuse. The regulatory objective of the ER Program is to meet all requirements specified in the 1989 Consent Decree between the Department of Energy (DOE) and the State of Ohio and the Administrative Order by Consent with the U.S. Environmental Protection Agency (EPA) (amended 1994) to remediate hazardous waste sites at the Portsmouth facility.

Table C.1 Interim and Completed Remedial Actions

Project	Page
X-749 Contaminated Materials Disposal Facility (North and South)	C-2
X-749A Classified Material Disposal Unit	C-3
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X-735 RCRA Sanitary Landfill (Northern Portion)	C-7
X-752 Hazardous Waste Storage Facility	C-8
X-750 Hazardous Waste Storage Tank	C-9
X-740 Waste Oil Handling Tank/Facility	C-10
X-120 Treatment Project - IRM	C-11
X-705A Incinerator	C-12
X-231B Oil Biodegradation Plot - IRM and In Situ Treatment	C-13
X-701B Interceptor Trench - IRM	C-14
X-749 Groundwater Containment Wall -IRM	C-15
Peter Kiewit Landfill - IRM	C-16
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X-700 Tank No.6	C-18
X-700 Chromic Acid Tank No.7	C-19
X-700 Tank No.8	C-20
X-344A Settling Tank	C-21
ASTs/USTs	C-22

X-749 Contaminated Materials Disposal Facility (North & South)

1. Site History/Description

The 11.5 acre X-749 landfill (N&S) was built in the southern half of the facility and operated from 1985 through 1990. Buried wastes were generally contained in metal drums or other containers suitable for the waste. The landfill area was divided into a northern portion and southern portion. The northern portion was approximately 200,000 square feet in size and contained wastes contaminated with industrial solvents, waste oils, and sludge classified as hazardous and low-level radioactive materials. The southern portion was approximately 130,000 square feet and contained nonhazardous, low level radioactive scrap materials. Trenches were excavated to a depth of 13 feet, filled with 8 feet of containerized waste material, and then backfilled with approximately 5 feet of native clay.

2. Selected Remedial Action

DOE submitted closure plans in 1989 to consecutively close both sections of the landfill with the inventory left undisturbed. The closure plans remedial action was to cover the landfill site with a multi-layer clay cap designed with a slurry wall and groundwater collection system. The collected groundwater would be pumped to a carbon filtration treatment facility where contaminants are removed. This proposed remedial action was approved by the OEPA in 1989, and closure of the X-749 Landfill was completed in 1992.

3. Performance Standard or Goals

The closure performance standard is to eliminate or minimize the future escape or contact of hazardous contaminants with the environment and/or groundwater. This performance standard is met by installing a multi-layer cover (cap) over the landfill to conform to RCRA/EPA guidelines and by establishing a groundwater collection system to collect any groundwater moving through the landfill, and to prevent contaminated groundwater from migrating down-gradient of the landfill site.

4. Institutional Controls

Since this landfill is outside the controlled access of the Portsmouth Facility, the landfill is totally enclosed by a 6-foot high chain link fence. Entry gates to this enclosed area are kept locked and access is allowed only for authorized personnel. Monitoring of the groundwater collection system is executed four times a year to determine its performance. Quarterly inspection of the closed landfill requires inspection of: security control devices, engineered cap, gas ventilation system, run-on/run-off control devices, well conditions, bench mark integrity, and cover conditions.

X-749A Classified Material Disposal Unit

1. Site History/Description

The 6 acre X-749A landfill was built just south of the plant's main administration building and was operational from the 1950's until 1988. The landfill was used to dispose of classified decontaminated process equipment, computer tapes, magnetic media, shredded documents (containing classified information) as well as classified equipment for a metal working plant. Trenches were excavated to a depth of 14 feet, filled with 8 feet of classified material, and then backfilled with approximately 6 feet of native clay.

2. Selected Remedial Action

DOE submitted closure plans, in December 1988, to close this landfill in compliance with EPA regulation for solid waste landfills. The Closure Plan's remedial action was to cover the landfill site with a multi-layer clay cap. This proposed remedial action was approved by the OEPA in 1992 and closure of the X-749A Landfill was completed and certified in 1994.

3. Performance Standard or Goals

The closure performance standard is to eliminate or minimize the future escape or contact of hazardous contaminants to the environment. This performance standard was met by installing a multi-layer cover(cap) over the solid waste landfill to conform to EPA guidelines.

4. Institutional Controls

Since this landfill is inside the controlled access of the Portsmouth Facility, no additional security controls were required besides posting of the landfill area. Quarterly inspection of the closed landfill requires inspection of: security control devices, the engineered cap, run-on/run-off control devices, bench mark integrity, and cover conditions. Groundwater wells surrounding the X-749A will continue to be routinely monitored as part of the plant's groundwater protection program.

X-616 Surface Impoundment / X-735 Mono Cells

1. Site History/Description

Two impoundments or lagoons located on the west side of the Portsmouth facility were designed to contain waste water from the X-616 Liquid Effluent Control Facility, a facility which treated and removed chromium from cooling water before it was discharged from the site. The plant has replaced the chromium-based corrosion inhibitor in the recirculating cooling system and the X-616 Facility is no longer in operation.

2. Selected Remedial Action

As part of the ER Program, a groundwater quality assessment was conducted in 1988 and chromium was detected in the samples of groundwater beneath the X-616 treatment area. DOE submitted closure plans to close the X-616 surface impoundments in 1989 in accordance with EPA regulations. The Closure Plan's remedial action was to remove, dewater, and detoxify the chromium sludge from the impoundments. The treated sludge was placed in a separate BAT sanitary landfill and this area was closed. The surface impoundments area was backfilled and covered with vegetation. This proposed remedial action was approved by the OEPA in 1989, and closure of the X-616 impoundments was completed and certified in 1992.

3. Performance Standard or Goals

The closure performance standard was to eliminate or minimize the future escape or contract of hazardous contaminants to the environment. This performance standard was met by removal and detoxification of the contaminated source to conform to EPA guidelines.

4. Institutional Controls

Since this surface impoundment has had all contamination removed, no additional security controls were required besides posting of the impoundment area. Quarterly inspection of the closed impoundment required inspection of: run-on/run-off control devices, bench mark integrity, and cover conditions. Groundwater will continue to be monitored in the X-616 area as part of the plant's ongoing groundwater protection program.

X-744G Hazardous Waste Storage Facility

1. Site History/Description

The 88,000 square foot X-744G warehouse, located in the northeastern portion of the site, was built in 1956. The facility was used as a pipe fabrication area during the early construction phase of the plant. From 1957 until 1992, the X-744G building stored hazardous waste including radioactive and mixed waste sludge. In accordance with the OEPA's Director Finding and Orders, mixed waste containing RCRA constituents in this facility was removed and allowed to be stored in the X-7725 while a RCRA Part B permit was being processed for the X-7725 Facility.

2. Selected Remedial Action

As part of the ER Program, the interior of the building was tested for RCRA contamination. DOE submitted a closure plan to "clean close" the facility, in May 1992, following EPA regulations, and to return the facility after closure to normal operational use. The Closure Plan's remedial action was to decontaminate the interior of the facility of RCRA contaminants. This proposed remedial action was approved by the OEPA in 1992, and closure of the X-744G was completed and certified in late 1994.

3. Performance Standard or Goals

The closure performance standard was to eliminate or minimize the need for further maintenance. Also, the goal was to minimize or eliminate to the extent necessary to protect human health and the environment post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off or hazardous waste decomposition product to the ground or surface waters or to the atmosphere.

4. Institutional Controls

Ground beneath the warehouse was removed for closure. Since the warehouse has all RCRA contamination removed, the facility underwent "clean closure." No additional security controls were required except posting signs at all facility entry points of fixed radiological contaminants within the interior of the facility.

X-744Y Mixed Waste Storage Yard

1. Site History/Description

The X-744Y Mixed Waste Storage site is located in the northeastern portion of the site and was used from 1955 to 1986 as a general purpose storage yard. In 1986, containerized mixed waste (containing both radioactive and hazardous material) were stored at the site. These included asbestos, low-level radioactive wastes such as workers' protective clothing and scrap metal) and mixed solid waste, mainly solvent-contaminated rags used for degreasing equipment surfaces. Approximately 125 large circular steel containers and 400 steel boxes contained a variety of these wastes.

2. Selected Remedial Action

As part of the ER Program, each container had to be emptied and the wastes segregated and repackaged into RCRA authorized containers. DOE submitted a closure plan in May 1992 to sort and recontainerized contaminated waste. After sorting and repackaging the solid waste, the hazardous waste was transported to the X-7725 Mixed Waste Storage facility for storage and final disposition. This proposed remedial action was approved by the OEPA in 1992, and sorting and removal of the hazardous waste from the X-744Y storage site was completed in mid-1995. Soil samples identified minor levels of contaminants existing in the storage site soils. With the close proximity of the X-744Y storage to the X-701B waste site, it could not be determined that the X-744Y was the primary source of soil and groundwater contamination, but may be a contributor. Due to commingling of wastes, remediation of the soil and groundwater contamination will be determined during the Quadrant II Corrective Measures Study.

3. Performance Standard or Goals

The closure performance standard is to eliminate or minimize the need for further maintenance. Also, the goal is to minimize or eliminate, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off or hazardous waste decomposition product to the ground surface waters or the atmosphere.

4. Institutional Controls

Until all remediation of the potential contaminated soil and groundwater has been completed, the area has been cordoned off and posted. Entry to this area is closely monitored; only allowing access to authorized personnel. Quarterly inspection of the storage site requires inspection of: security control devices, run-on/run-off control devices, well conditions, and bench mark integrity.

X-735 RCRA Sanitary Landfill (Northern Portion)

1. Site History/Description

The 7.4 acres X-735 Sanitary Landfill (Northern Portion) was built in the northern portion of the facility and operated from 1981 through 1992. The sanitary landfill is approved by the Ohio EPA for the disposal of conventional (non-hazardous, non-hazardous, non-PCB) solid wastes. Disposal takes place by shallow land burial using the trench and fill methods. Trenches are excavated to an elevation of approximately 5 feet above the water table and filled with approximately 10-15 feet of alternating layers of refuse and cover material. Solid wastes are delivered to the landfill by compactor trucks, pickup trucks and dumps trucks. The waste is spread in the trench and compacted by bulldozer. A soil cover is then applied and compacted. In 1991, analytical results on seeps from the side walls of the landfill revealed that the seeps contained hazardous RCRA constituents. Investigation indicated that 12,000 pounds of solvent-contaminated rags had been inadvertently disposed in Cells 1-6. Cells 1-6 were immediately closed and identified as requiring closure as a hazardous waste landfill under RCRA requirements.

2. Selected Remedial Action

The Department of Energy (DOE) and the State of Ohio signed a joint consent decree in August 1989 to clean up hazardous waste sites at the Portsmouth Facility. DOE submitted a closure plan in 1992 to close the X-735 Landfill (Cells-6) with the inventory left undisturbed. The remedial action, completed in 1995, including installation of a multi-layer clay RCRA cap over Cells 1-6 on the Northern portion of the X-730 Sanitary Landfill.

3. Performance Standard or Goals

The closure performance standard is to eliminate or minimize the future escape or contact of hazardous contaminants to the environment and/or groundwater. This performance standard is met by installing a multi-layer cover (cap) over the landfill to conform to RCRA/EPA guidelines and establishing groundwater monitoring to determine the effectiveness of the remedial action in preventing contaminants from migrating down-gradient of the landfill site.

4. Institutional Controls

Since this landfill is outside the controlled access of the Portsmouth Facility, the landfill is totally enclosed by a 6-foot high chain link fence. Entry gates to this enclosed area will be kept locked and access will be only for authorized personnel. Monitoring of the groundwater collection system is performed four times a year to determine its performance. Quarterly inspection of the closed landfill requires inspection of: security control devices, engineered cap, gas ventilation system, run-on/run-off control devices, well conditions, bench mark integrity, and cover conditions.

X-752 Hazardous Waste Storage Facility

1. Site History/Description

The 15,000 square foot X-752 warehouse, located in the northwest portion of the site, was built in 1978. The facility was used until 1992 to store hazardous waste consisting of trichloroethene wastes, paint wastes, flammable solvents, cyanide wastes, polychlorinated biphenyl waste oils, mercury residues, watery sludge containing EP-Toxicity metals and uranium, and laboratory packs containing expired laboratory chemicals. In accordance with the OEPA's Director's Findings and Orders, mixed waste containing RCRA constituents in this facility were removed and allowed to be stored in the X-7725 while a RCRA Part B permit was being processed for the X-7725 Facility.

2. Selected Remedial Action

As part of the ER Program, the interior of the X-752 building was tested for RCRA contamination. DOE submitted a closure plan to "clean close" the facility following EPA regulations and return the facility after closure to normal operational use. The Closure Plan's remedial action was to decontaminate the interior of the facility of RCRA contaminants and to determine if any of the stored contaminants breached the building structure and contaminated the ground or groundwater. This proposed remedial action was approved by the OEPA in 1992, and closure of the X-752 was completed in late 1994. The OEPA approved the certification of closure in January 1995.

3. Performance Standard or Goals

The closure performance standard was to eliminate or minimize the need for further maintenance. Also, the goal is to minimize or eliminate, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated runoff or hazardous waste decomposition product to the ground or surface waters or the atmosphere.

4. Institutional Controls

Since this facility had all RCRA contamination removed and the facility was "clean closure," no additional security controls were required.

X-750 Hazardous Waste Storage Tank

1. Site History/Description

The X-750 Hazardous Waste Storage Tank is located on the eastern half of the facility adjacent to the north side of the X-750 Fuel Station/Mobile Equipment Maintenance Shop. The X-750 tank was originally installed in 1962 to collect waste oils from the X-750 building grease shop. The tank was used by the Goodyear Atomic Corporation from 1962 until 1986. From 1986 until 1990, the tank was used by Martin Marietta Energy Systems (MMES). An inspection at that time revealed that other wastes in addition to oil were being discharged into the tank. On one or more occasions the following materials were discharged into the tank: chlorinated solvents, gasoline, diesel fuel, and a commercial formulation containing cresylic acid (a mixture of cresols).

2. Selected Remedial Action

DOE submitted a closure plan in May 1992 for the removal of the tank. The Closure Plan's remedial action was to remove and decontaminate the tank and its associated piping system. It also required removal of contaminated soil adjacent to the tank. This proposed remedial action was approved by the OEPA in September 1992, and the X-750 Hazardous Material Storage Tank was removed in accordance with the approved closure plan, and the closure of the X-750 Hazardous Material Storage Tank was completed and certified clean closure in the first half of 1993. The OEPA approved the Certification of Closure in January 1995.

3. Performance Standard or Goals

The closure performance standard is to minimize or eliminate, to the extent necessary to protect human health and the environment, post closure escapes of hazardous waste, hazardous constituents, leachate, contaminated run-off or hazardous waste decomposition products to the ground or surface waters or to the atmosphere. The performance standard was met by excavating the backfill material surrounding the tank, lifting the tank from the excavation and placing it in an area for sludge removal and decontamination, decontamination and removal of all associated piping, removal of all contaminated soil in the vicinity of the tank, and finally, lining the excavation area with a geomembrane and filling the excavation with washed gravel and crushed limestone. The remaining area was then restored as a paved right-of-way for traffic to and from the X-750 Fuel Station/Mobile Equipment Maintenance Shop.

4. Institutional Controls

Prior to excavating the tank and the surrounding soil, the ambient atmospheric conditions in the vicinity of the tank and feed lines were screened to determine if explosive conditions existed at the location. Personnel involved in the decontamination and removal activities wore Level C protective clothing with respiratory protection equipment throughout the duration of the removal and remedial activities. The X-750 Hazardous Waste Storage Tank was removed and clean closure accomplished.

X-740 Waste Oil Handling Tank/Facility

1. Site History/Description

The X-740 Waste Oil Handling Tank/Facility is located on the western half of the site. The X-740 Tank and associated sump is located in the northwest corner of the X-740 storage facility. The tank/sump was installed in early 1986 and used continuously by maintenance until it was taken out of service in 1990. The tank/sump was used to collect residual waste oil solvents and PCB contaminated waste oils from a drum crushing operation located at the tank site. The drum crusher and metal grate have been removed from the tank and are being stored nearby. The floor of the tank has been swept and the residuals have been removed from the sump. All materials have been managed as hazardous waste. The X-740 storage facility covers an existing 120 ft x 50 ft concrete pad. The floor of the X-740 is composed of 6-inch concrete with 2 ramp areas.

2. Selected Remedial Action

DOE submitted a closure plan in May 1993 for the decontamination and removal of the X-740 tank/sump/facility. The Closure Plan's remedial action cited the actions to be taken including removing the waste residue remaining on the walls surrounding the X-740 tank/sump and the walls of the tank/sump itself. Upon completion of initial decontamination, the concrete tank/sump was excavated. All concrete 2 feet out from the diked tank/sump was removed and demolished. The residue was packed in 55-gallon drums and transported to an onsite storage facility. Following removal of the tank/sump, 2 feet of underlying soil was also removed. The drum crusher and metal grate was removed from the tank and managed as hazardous waste. Upon excavation of the X-740 tank/sump facility, removal of the backfill, and sampling of the underlying soil, the excavated area was backfilled with clean material. The level of groundwater contamination was also determined through sampling.

3. Performance Standard or Goals

The closure performance standard is to minimize or eliminate, to the extent necessary to protect human health and the environment, post closure escapes of hazardous waste, hazardous constituents, leachate, contaminated run-off or hazardous waste decomposition products to the ground or surface waters or to the atmosphere. The closure performance standard for the X-740 tank/sump facility is to eliminate or minimize the future escape or contact of hazardous contaminants to the environment and/or groundwater. The performance standard was met by decontamination of the tank/sump facility area, removal of the tank/sump and associated structures, removal of contaminated soil, and replacement of clean backfill material. Soil samples were taken by performing soil borings and analyzed to detect the presence of individual hazardous chemicals in the soil underneath the facility.

4. Institutional Controls

Access to the X-740 Tank/Sump Facility is controlled by the security fence that surrounds the plant site. While the decontamination and removal activities took place, the work area around the X-740 was barricaded and access restricted with fencing. No smoking signs are posted. All personnel involved in the decontamination and removal of the X-740 tank/sump were required to wear protective clothing and respirators as needed.

X-120 Treatment Project - IRM

1. Site History/Description

The X-120 Pilot Scale Treatment Project is an experimental facility that tests treatment media other than carbon for effectiveness in removing volatile organic compounds (VOCs) from groundwater. The project also evaluates passive-flow treatment that is not energy intensive. A horizontal well was drilled into and through the X-120 plume allowing groundwater to flow naturally into the testing facility. The discharge end of the well is equipped with a shutoff valve that automatically closes in the event of pump failure. The facility was constructed adjacent to the X-120 groundwater plume in the former X-120 training facility site, west of the X-749 Landfill area on the southwest corner of the PORTS site and upstream of PORTS National Pollutant Discharge Elimination System (NPDES) outfall 012. Effluent from the test facility is discharged into the drainage flowing to the 012 outfall, presently monitored for trichloroethane (TCE).

2. Selected Remedial Action

The facility is a 30 by 40 foot metal building with a 16 foot eave height to allow for use of an overhead crane. Groundwater from the X-120 plume is piped into the building and directed to one of three treatment bays. The bays consist of a series of 55-gallon drums filled with experimental treatment media. As many as three different types of reactive media may be tested concurrently. This facility is highly automated and equipped with instruments to facilitate data collection. This system is totally enclosed and no air emissions are anticipated. All effluent from the treatment bays flows to the sump for monitoring. One treatment method is to expose the contaminated groundwater to iron filings which cause a unique chemical reaction to take place. As a result of this reaction, hydrocarbons are broken down and the resulting harmless chemical compounds are then acceptable for release to the environment. If the effluent does not meet regulatory standards for VOCs, it is pumped into carbon canisters for final treatment. Construction of the X-120 Pilot Scale Treatment Project facility began in June 1995 and operations at the facility began in October 1995.

3. Performance Standard or Goals

The performance standard for this test facility is to successfully treat groundwater to make it acceptable for release to the environment. The goal of the X-120 Pilot Test Facility is to successfully demonstrate more cost effective alternate technologies for the removal of contaminants from groundwater other than the accepted practice of pumping and cleaning through carbon filtration.

4. Institutional Controls

The X-120 Pilot Test Facility is highly automated and records test data automatically every 30 minutes. This data is downloaded to a computer for analysis every 12 hours. All effluent is pumped to a sump for monitoring prior to release to the environment. In the event of a power failure, all in fluent to the facility is shut off and there is no discharge from the facility until power is restored and monitoring can continue. The test phase of the X-120 Pilot Project will continue for one year and then will be reevaluated prior to continuing or discontinuing the project.

X-705A Incinerator

1. Site History/Description

The X-705A incinerator sits on a 4000 ft area designated as the X-705B contaminated storage lot and has been closed and inoperable since 1986. During its operation, the incinerator burned uranium contaminated wastes. The soils around the incinerator building and storage pad contain levels of uranium higher than background concentrations. The X-705A incinerator and building have been demolished and the construction debris have been disposed of appropriately. At X-705A/B, the identified constituents of concern (COCs) are uranium, technetium-99, and the polycyclic aromatic hydrocarbons (PAHs), benzo (A) pyrene and dibenzo (a,h) anthracene in soils. Soils around the incinerator will be remediated in 1996.

2. Selected Remedial Action

After an evaluation of potential alternatives for remedial action at the X-705A/B area, the Ohio and U.S. EPA's preferred alternative consisted of decontamination and demolition of the X-705A incinerator and excavation of areas of soil contamination, soil washing (if practical), and final disposal in either a low level rad waste disposal facility or a solid waste landfill depending on the amount of radioactive material in the soil. Decontamination and demolition of the X-705A incinerator and building were to be completed prior to the excavation of the soil. Sampling of the demolition debris will be conducted to determine appropriate disposal of the debris.

3. Performance Standard or Goals

The closure performance standard is to eliminate or minimize the future escape or contact of hazardous contaminants with the environment and/or groundwater. The performance standard is met by the decontamination and demolition of the X-705A incinerator and building followed by the excavation of the areas of soil contamination, soil washing (if practical), and final appropriate disposal. These actions will remove contaminant levels to an acceptable risk level protective of human health and the environment.

4. Institutional Controls

Since the X-705A incinerator is within the boundary of the Portsmouth facility, access is controlled by the security fence that surrounds the plant. Further site isolation measures were taken including the installation of a security fence around the perimeter of the contaminated X-705A/B area and the posting of signs prohibiting entry. In addition, the area is under environmental monitoring to observe migration of the contaminants in the environment.

X-231B Oil Biodegradation Plot - IRM and In Situ Treatment

1. Site History/Description

The X-231B Oil Biodegradation site is situated in the south-central portion of the secured area of the plant and consists of two adjacent locations, with a total area of 36,000 square feet. It was used from 1976 to 1983 for biodegradation of waste oils from process operations that contained degreasing solvents, including trichloroethylene (TCE) and small amounts of uranium and technetium. The plots were originally designed to allow for digestion of organic wastes by bacteria occurring naturally in the soils. However, because the oils also contained TCE and other volatile organic compounds (VOCs) which could not be digested, these contaminants remained in the soil and spread to the groundwater beneath the site.

2. Selected Remedial Action

In 1992 four *In Situ* (meaning in place) soil treatments were demonstrated at the X-231B Oil Biodegradation site. The four processes demonstrated on-site included soil mixing combined with 1) solidification/stabilization - a process of injecting a grout mixture under pressure into the soil to solidify and immobilize the contaminated soil in a concrete-like form, 2) isothermal vapor extraction - a process of mixing the contaminated soil with ambient air to vaporize the VOCs, 3) thermally enhanced vapor extraction - a process similar to No. 2 but using hot air or steam injection instead of ambient air, and 4) peroxidation destruction - a process whereby the VOCs are destroyed by chemical reaction when diluted hydrogen peroxide solution is applied as a mist through the ambient air stream. Preliminary findings showed that the use of methods 3 and 4 was the most successful and efficient method of removing VOCs. In 1994, Interim Remedial Measures (IRM) were concluded at X-231B consisting of the installation of a multi-layer cover over the site and an underground trench to channel groundwater to a filtration treatment facility (X-622).

3. Performance Standard or Goals

The interim remedial closure performance standard is to eliminate or minimize the future escape or contact of hazardous contaminants with the environment and/or groundwater. This performance standard was by the evaluation of the four field demonstrations, selection of the one deemed most effective, and the implementation of the selected solution which concluded with closure activities being completed in 1994.

4. Institutional Controls

Since this site is within the boundary of the Portsmouth Facility, access is controlled by the security fence located around the X-231B site, as well as the security fence that surrounds the plant. A multi layer cover was installed over the X-231B unit, to impede infiltration of surface water through the site. In addition, a trench drain was installed 24 to 28 ft below the surface to channel contaminated groundwater to an installed well where it is pumped to a carbon-filtration treatment facility (X-622) for removal of contaminants.

X-701B Interceptor Trench - IRM

1. Site History/Description

The X-701B site, located in the northeastern portion of the facility, consists of a holding pond and two sludge containment ponds. The holding pond began receiving liquid wastes in 1954 and continued to receive them until 1988. These waste solutions were both acidic and basic, and consisted of laboratory and decontamination wastes, and wastes from the uranium recovery building and the chemical cleaning building. The east pond reached capacity in 1973 while the west pond did not reach capacity until 1985. The holding pond continued to receive wastewater and to accumulate sludges until 1988 when its use was discontinued. The sludges were classified as “mixed wastes” (containing both radioactive and hazardous components). A trench interceptor system was constructed and completed in November 1991, as an Interim Remedial Measure (IRM) to capture and treat contaminated groundwater and preventing it from spreading beyond the plant boundaries. The Ohio EPA reviewed and approved the construction of the IRM until a more permanent solution is found.

2. Selected Remedial Action

When elevated levels of trichloroethylene (TCE) were found in the groundwater on site and the source was traced back to X-701B ponds, an interim remedial measure consisting of the construction of two T-shaped trenches for the collection of contaminated groundwater was instituted. Construction of the trench interceptor system involved soil removal down through the shallow aquifer to the top of the bedrock zone. The bedrock consists of shale with very low permeability which acts as a barrier to the downward movement of the contaminated groundwater. The trenches are lined with a fabric which allows water, but not sediment to pass into the trench. Drain pipes and pumps were installed in the bottom of the trenches. The trenches were then backfilled with gravel and clay. Groundwater is collected in the trenches and pumped to a carbon filtration treatment facility located adjacent to the trenches. The USEPA and the Ohio EPA approved the design in 1991 and it was completed in September 1991.

3. Performance Standard or Goals

The interim remedial closure performance standard is to eliminate or minimize the future escape or contact of hazardous contaminants with the environment. This performance standard is met by the installation of the interceptor trenches and the evaluation of results from the long-term groundwater monitoring effort in containing the contaminant.

4. Institutional Controls

Access to the X-701B Holding Pond and Sludge Containment Ponds as well as the interceptor trenches is controlled by the security fence that surrounds the plant site. Groundwater monitoring is to be conducted periodically to sample the groundwater plume for contaminants of concern and to assess the long-term effectiveness of the closure.

X-749 Groundwater Containment Wall - IRM

1. Site History/Description

This facility is located near the perimeter road in the southern portion of the plant. The X-749 landfill operated from 1953 until 1990. Based on extensive monitoring, it was determined that the groundwater contamination (TCE) was limited to the uppermost layer of the groundwater, which is not used for drinking water and does not pose a health threat to nearby properties.

2. Selected Remedial Action

As an interim remedial measure (IRM), the selected remedial action was to construct a 1,077 foot subsurface barrier wall with a multi-layer clay cap installed over the site and a groundwater collection system to prevent groundwater containing the industrial solvent trichloroethene (TCE), from moving outside the boundaries of the DOE Portsmouth Facility. Construction of the wall was approved by both the Ohio and the U.S. EPAs in spring 1994. The wall was formed beneath the surface by using a crane with deep soil mixing equipment. Four tandem drilling augers mixed soil with a bentonite, or clay like, slurry to an average depth of 25 feet. The wall was built in an east-west direction, parallel to and 30 feet north of the southern plant boundary line. The underground barrier is approximately three feet in width and extends down at least two feet into the bedrock layer.

3. Performance Standard or Goals

The interim remedial closure performance standard is to eliminate or minimize the future escape or contact of hazardous contaminants. This performance standard is met by the continued monitoring of the groundwater for contaminants to the south of the IRM trench. Groundwater monitoring wells both in the area and off-site are used. The Groundwater Containment Wall will contain the contaminated groundwater for at least 3 to 4 years, allowing time for the development and implementation of a final remedy.

4. Institutional Controls

Since the X-749 Groundwater Containment Wall is within the boundary of the Portsmouth Facility, but outside the security fence that surrounds the plant site, warning signs were posted. Until a final remedy for cleaning up the contaminated groundwater plume is developed and implemented, the groundwater in the area and in the adjacent areas outside the plant boundaries will continue to be monitored on a quarterly basis through the use of groundwater monitoring wells.

Peter Kiewit Landfill - IRM

1. Site History/Description

The Peter Kiewit Landfill operated from approximately 1953 until 1968. The landfill is named after the construction contractor who built the plant. The landfill was first used to dispose of waste generated during initial construction of the plant in the early 1950s. The area was then used as a salvage yard and construction waste disposal area before being converted into a sanitary landfill accepting nonhazardous solid wastes. However, in 1990, routine environmental monitoring detected a small seepage of vinyl chloride, a degradation product of trichloroethene (TCE), which was an industrial cleaning solvent formerly used at the plant. TCE was detected in three small water seeps coming from the landfill, located at the south end of the plant near Big Run Creek.

2. Selected Remedial Action

The selected interim remedial measure for the Peter Kiewit Landfill was to relocate a portion of the Big Run Creek (located on the site) away from the landfill and to institute a surface water collection system to address the seepage problem. These two measures were completed in 1994. Phase I of the project, completed in August 1994, consisted of construction of a site access road and clearing of brush, in addition to drilling to determine bedrock levels along the site laid out for the new creek bed away from the landfill. Phase II, completed in November 1994, consisted of moving approximately 1,000 feet of creek bed. The final phase consisted of installation of a collection system, piping and monitoring instruments. Work was completed in late 1994.

3. Performance Standard or Goals

The interim remedial closure performance standard is to eliminate or minimize the future escape or contact of hazardous contaminants with the environment and/or groundwater. The performance standard has been met by the installation of a surface water collection system and the physical relocation of a portion of Big Run Creek away from the Peter Kiewit Landfill to allow for the installation of the interceptor trench, X-701B.

4. Institutional Controls

This landfill is within the boundary of the Portsmouth Facility, but outside the security fence that surrounds the central core of the plant site. Final cleanup actions outlined in a Corrective Measures Study are under review by the Ohio and the U.S. EPA. Until a permanent solution is implemented, monitoring of the creek and the surrounding soils will continue to take place on a quarterly basis.

Well 6B - IRM

1. Site History/Description

Well 6B is part of the X-608 Well Field and is situated in the flood plain of the Scioto River, West of Piketon, Ohio. On March 1, 1989, during routine maintenance on the Well 6B pump, approximately 264 milliliters of mercury and eight gallons of mineral oil were spilled into the water column. In addition, parts of the pump were also lost down the well. Attempts to retrieve the parts and contaminants were nominally successful. In an effort to seal the mercury in the water column, a bentonite plug was placed at the bottom of the well. The extent and degree of mercury release was assessed by groundwater sampling at the X-608 production wells and selected observation wells. Remediation included well-cleaning operations and pump-and-treat operations at Well 6B. Local groundwater flow was also monitored to determine possible mercury migration pathways.

2. Selected Remedial Action

The initial remediation phase for Well 6B was removal of residual mineral oil lost from the pump motor during the mercury release. Polymers were added to the well to separate the oil from the water. The well was swabbed. The second step in the process was the addition of a caustic solution treatment to emulsify the separated oil. The well was surged several times to evenly distribute the caustic solution. Centrifugal pumps were then used to skim residual floating oil. The second cleanup approach was to remove mercury adhering to the well casing by scouring the casing walls and removing the loosened material from the well after the addition of phosphate to bring loosened material into suspension. The loosened material was bailed out and drummed for proper disposal. Water samples from Well 6B indicated mercury levels still above the target level of 2 parts per billion (ppb). Another attempt at remediation was made in 1994. This successful attempt included driving a larger diameter casing to allow for reaming the Well 6B well bore, removing the old well casing and screen, air lifting aquifer material, and sampling aquifer water to determine if mercury concentrations in the well water were below 2 ppb. The well samples met this criteria.

3. Performance Standard or Goals

The interim remedial decontamination and decommissioning (D&D) closure performance standard for Well 6B is to eliminate or minimize the future escape or contact of hazardous contaminants with the environment and/or groundwater. This performance standard was met by completing the final remediation recommendation for Well 6B. The completed recommended action consisted of recompleting and redeveloping Well 6B as a gravel pack well followed by one year of sampling for mercury.

4. Institutional Controls

Monitoring of Well 6B was continued for the period of one year to ensure that mercury levels remained below the acceptable level of 2 parts per billion. The well bore was returned to MMUS for recompletion and sampling and eventual return to a public water supply source.

X-700 Tank No. 6

1. Site History/Description

The X-700 Tank No. 6 is located in Building X-700 which is located on the central northeast area of the DOE facility. Building X-700 is located north of Building X-720 across the street and east of Building X-705. Building X-700 is an equipment cleaning facility. Tank No. 6 is located in a north/south direction approximately three feet from the outer east wall. X-700 Tank No. 6 is an open pit measuring approximately 46 feet long by 8 feet wide by 11 feet deep. It is constructed of an acid proof brick lining, a 1/4" mastic inner lining and a steel shell. X-700 Tank No. 6 began operation in 1955. The tank was one of eight tanks used in cascade equipment cleaning at PORTS. Tank No. 6 was taken out of operation and drained in 1988. Subsequently and until October 1991, Tank No. 6 was used to contain sump wastewater containing trichloroethylene and 1,1,1 - trichloroethane, both listed as hazardous wastes of EPA hazardous waste code F001. Because X-700 Tank No. 6 was used to contain a wastewater with listed hazardous wastes, it is considered to be a regulated hazardous waste management unit (HWMU) under RCRA regulations.

2. Selected Remedial Action

Because X-700 Tank No. 6 was used to contain a wastewater with a listed hazardous waste, it is considered to be a regulated hazardous waste management unit (HWMU) under RCRA regulations. As part of the environmental restoration program, the outer surface and the floor in the immediate area of the X-700 Tank No. 6 was decontaminated. A determination was made on the need to remove the acid resistant brick lining based on whether or not hazardous wastes had migrated to the inner lining. This was followed by decontamination of the neoprene tank lining, the steel tank shell, bottom surfaces of the tank, the floor beneath the tank, removal of the associated piping, and treatment of the soil underneath the tank. The closure plan for the X-700 Tank No. 6 was approved May 1992. Closure remedial activities were completed August 1994 and a Certification Report was prepared in October 1994. Certification of the closure measures is pending.

3. Performance Standard or Goals

The closure performance standard is to eliminate or minimize, to the extent necessary, to protect human health and the environment, post closure escapes of hazardous waste, hazardous constituents, leachate, contaminated run-off or hazardous waste decomposition products to the ground or surface waters or to the atmosphere. In addition, this performance standard is designed to eliminate or minimize the need for further maintenance.

4. Institutional Controls

PORTS is a controlled access facility with fencing, gates, and numerous other features that contribute to the safety and security of the facility. Access to the X-700 Building is controlled by the security fence that surrounds the plant site production facilities, security forces on patrol, and locked entry-ways.

X-700 Chromic Acid Tank No. 7

1. Site History/Description

The Chromic Acid Tank No. 7, located in Building X-700, began operation in 1955. It is a rectangular open pit configuration with a confined space in the basement underneath the tank, where a sump, piping, and building utilities are located. It was used for bright dip cleaning of the equipment involved in the cascade upgrade project until 1983 when an improved equipment cleaning method was completed. The tank was used periodically from 1983 to 1988 and has been out of operation since 1988. The tank has been filled only once, according to existing records; however, water has been added through the years to compensate for water evaporation. The tank was emptied on two different occasions: 1) temporarily, to plug the tank sump valve at the bottom of the tank, and 2) in February 1988, when the tank contents were transferred into waste drums. The drums, thought to be suitable, failed and the cleaning solution was returned to the tank with accumulated rainwater.

2. Selected Remedial Action

As part of the ER Program, the outer surface and the floor in the immediate area of the X-700 Tank No. 7 was decontaminated. A determination was made on the need to remove the acid resistant brick lining based on whether or not hazardous wastes have migrated to the inner lining. This was followed by decontamination of the neoprene tank lining, the steel tank shell, bottom surfaces of the tank, the floor beneath the tank, removal of the associated piping, and treatment of the soil underneath the tank. Closure remediation measures for the X-700 Chromic Acid Tank No. 7 was approved in May 1992. Closure activities were completed in July 1993. A certification report was prepared in November 1993. Certification of the closure is pending at this time.

3. Performance Standard or Goals

The closure performance standard is to eliminate or minimize the need for further maintenance. Also, the goal is to minimize or eliminate--to the extent necessary to protect human health and the environment--post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated runoff or hazardous waste decomposition products to the ground or surface waters or the atmosphere.

4. Institutional Controls

PORTS is a controlled access facility with fencing, gates, and numerous other features that contribute to the safety and security of the facility. Access to the X-700 Building is controlled by the security fence that surrounds the plant site production facilities, security forces on patrol, and locked entry-ways.

X-700 Tank No. 8

1. Site History/Description

The X-700 Tank No. 8, located in Building X-700, is a rectangular open pit configuration measuring approximately 46 feet long by 8 feet wide by 11 feet deep. It is one of eight tanks in the X-700 Building used in cascade equipment cleaning. The X-700 Tank No. 8 was put into operation in 1955. The X-700 Tank No. 8 contained a solution of hot water used to clean piping and equipment involved on the cascade upgrade project until 1983 when an improved equipment cleaning method was completed. The tank was used periodically from 1983 to 1988 at which time it was taken out of operation. Existing records and employee information indicate the tank was filled only once, although water has been added through the years to compensate for water evaporation. In February 1988, the tank contents were transferred for treatment to the X-701C Neutralization pit and discharged to the X-701B facility. Wastewater was stored in X-700 Tank No. 8 during the period between February 1988 and October 1991 until pumped through an activated carbon filtration unit and then stored in X-700 Tank No. 1, 3, or 4 awaiting sample analysis and review of the data.

2. Selected Remedial Action

As part of the environmental restoration program, the outer surface and the floor in the immediate area of the X-700 Tank No. 8 was decontaminated. A determination was made on the need to remove the acid resistant brick lining based on whether or not hazardous wastes had migrated to the inner lining. This was followed by decontamination of the neoprene tank lining, the steel tank shell, bottom surfaces of the tank, the floor beneath the tank, removal of the associated piping, and treatment of the soil underneath the tank. The closure plan for the X-700, Tank No. 8 was approved May 1992. Closure recommendation activities were completed in August 1994, and a certification report was prepared in October 1994. EPA certification of the closure measures is pending.

3. Performance Standard or Goals

The closure performance standard is to eliminate or minimize the need for further maintenance. Also, the goal is to minimize or eliminate to the extent necessary to protect human health and the environment post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated runoff or hazardous waste decomposition product to the ground or surface waters or to the atmosphere.

4. Institutional Controls

PORTS is a controlled access facility with fencing, gates, and numerous other features that contribute to the safety and security of the facility. Access to the X-700 Building is controlled by the security fence that surrounds the plant site production facilities, security forces on patrol, and locked entry-ways.

X-344A Settling Tank

1. Site History/Description

The X-344A Settling Tank is located adjacent to the north side of the X-344A UF₆ Sampling Building and was designed to receive runoff from drains inside the building. The X-344A Sampling Building is located in the western half of the DOE facility. The Settling Tank formed part of a wastewater treatment system. Wastewater from the X-344A Sampling Building entered the X-344A Settling Tank, prior to discharge into the X-342C Neutralization Pit. The X-342C Neutralization Pit then discharged into the North Holding Pond. The Settling Tank was connected to the X-344A Sampling Building by drain lines. All but one drain were capped in 1989. These drains primarily served the electrolytic cell cleaning area. The wastewater entering the Settling Tank consisted of floor wash down solutions and condensate from noncontact steam heating and from the neutralization of cell electrolyte. The tank is a ground-level, concrete tank approximately 16 feet long by 6 feet wide and 5.5 feet deep.

2. Selected Remedial Action

As part of the ER Program, in 1993, the X-344A Settling Tank was previously emptied of liquid and sludge. Concurrent with this operation the constituents of the tank were sampled, analyzed, and then treated or drummed for removal. Additional remedial measures taken include: 1) Removal of the concrete structure of the X-344A Settling Tank and 2) attempted remediation of the concrete. Rinseate was sampled and analyzed. Non-treatable concrete was drummed. 3) Up to two feet of soil was excavated around and below the tank. 4) Three existing abandoned-in-place feed pipes were capped. 5) Soils were be sampled to determine constituents and extent of possible contamination. Clean soils were returned to the excavation to the extent practical. Contaminated soils were drummed. 6) The excavation was lined with a 30 mil high density polyethylene liner, backfilled with clean material and paved with concrete. The closure plan for the X-344A Settling Tank was approved in August 1992. The closure plan was modified and re-approved on June 10, 1994. Soil and tank removal was completed in July 1995 and a certification report was prepared in October 1995.

3. Performance Standard or Goals

The closure performance standard is to eliminate or minimize the future escape or contact of hazardous contaminants with the environment. Also, the goal is minimize or eliminate--to the extent necessary to protect human health and the environment post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated runoff or hazardous waste decomposition product to the ground or surface waters or the atmosphere. The performance standard was met by removal and detoxification of the contaminated source to conform to EPA guidelines.

4. Institutional Controls

PORTS is a controlled access facility with fencing, gates and other features that contribute to the safety and security of the facility. Access to the X-344A Settling Tank is controlled by the security fence that surrounds the plant site production facilities.

ASTs/USTs

1. Site History/Description

There were 10 underground and aboveground storage tanks within the scope of the environmental restoration activity at Portsmouth. Three of these tanks were never placed into service and were removed. One other underground storage tank did not pass tightness tests and has been removed. Six abandoned aboveground storage tanks were also demolished. Surrounding soils were characterized and, where necessary, excavated and treated according to regulatory limits on petroleum contamination in soil.

2. Selected Remedial Action

There was a corrective action implementation for aboveground tanks. Underground storage tanks were removed in accordance with the Bureau of UST regulations.

3. Performance Standard or Goals

The closure performance standard is to eliminate or minimize, to the extent necessary, to protect human health and the environment, post closure escapes of hazardous waste, hazardous constituents, leachate, contaminated run-off or hazardous waste decomposition products to the ground or surface waters or to the atmosphere. In addition, this performance standard is designed to eliminate or minimize the need for further maintenance.

4. Institutional Controls

Access to PORTS ASTs/USTs is controlled by the security fence that surrounds the plant site. While the decontamination and removal activities took place, the work area around the tank was barricaded and access was restricted.

APPENDIX - D.
CONCEPTUAL MODEL DATA SUMMARIES

A universal database in the OREIS format is being developed for ground and surface water and soil at PORTS, including data from more than 600 monitoring wells and 400 soil borings. Quarterly, groundwater monitoring data and synoptic Groundwater levels are also included. Data for PORTS is summarized in the annual groundwater report.

The five major groundwater contamination plume areas for the basis for conceptual models for groundwater at PORTS. Computerized groundwater models have been developed for two of the plumes, modeling is ongoing for two plumes and a model may be required in the future for the remaining plume.

A conceptual model will then be developed for the aggregate. This model will include a narrative, set of maps, figures and tables taken from the data summary to support the narrative.

APPENDIX - E.
PROJECT CONTROLS

APPENDIX E - PROJECT CONTROLS

See Common Program Office Policy on Project Management, October 17, 1995.

Reference DOE Order 4700.5 Project Control System Guidance.

Reference DOE Order 540.1 Life Cycle Asset Management.

Locally at the Portsmouth Site, Project Controls are implemented at the same level where funding is allocated. Each Solid Waste Management Unit (SWMU) is authorized by a Task Work Agreement (TWA) between Lockheed Martin Energy Systems and DOE. Groups of commonly typed TWAs are funded by DOE as Activity Data Sheets (ADS). Examples of common TWAs comprising an ADS are: Quadrant I (there are four Quadrants), the D&D Program, or Waste Management - Treatment. Each ADS is managed, monitored, and evaluated on a monthly basis to determine project progress, efficiency, risk and (ultimately) successful completion. Additionally, mid-year and year-end project fiscal reviews are conducted.

Each ADS is controlled by specific planning, control, and reporting documents which are listed below:

Planning Documents:

1. Baseline Proposal (or subsequently, Baseline Change Proposal).
2. Work Breakdown Structure.
3. Basis of Estimate.
4. Detailed Baseline TWA Estimates & Schedules.

Control Documents:

1. Funding Document.
2. Current Year Work Plans.
3. Engineering Service Orders.
4. Detailed Current Working TWA Estimates & Schedules.
5. Basis of Performance.
6. Cost Accounting System Database.

Reporting Documents:

1. Detailed Project Status Reports for internal project teams.
2. Monthly Status Review (MSR) Reports for LMES Management review.
3. Project Tracking System (PTS) Monthly Reports for DOE review.
4. Life Cycle Baseline Documents.
5. Miscellaneous Detailed and/or Summary Reports as requested.

NOTE: Reporting data is compiled using the LMES Management Control Information System/Comprehensive Environmental Restoration Management Information System (MCIS/CERMIS).